

INDEX OF PATENTS

RELATING TO

ELECTRICITY,

EMBRACING PATENTS ISSUED BY

THE UNITED STATES PATENT OFFICE

FROM JULY 1, 1892, TO JUNE 30, 1893.

APPENDIX No. XII.

COMPILED UNDER THE DIRECTION OF THE COMMISSIONER OF PATENTS.

WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1894.

282521

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APPENDIX No. XII.

PART I.

CONSISTING OF A

SUB-CLASS INDEX OF ALL PATENTS

RELATING TO

ELECTRICITY

Issued from July 1, 1892, to June 30, 1893, inclusive, giving names of Inventors,
and dates and numbers of Patents in each sub-class in
numerical and chronological order.

CLASSIFIED INDEX

OF

PATENTS RELATING TO ELECTRICITY

FROM JULY 1, 1892, TO JUNE 30, 1893.

171. GENERATION.—6. BATTERIES—GALVANIC.

No.	NAME.	DATE.	No.	NAME.	DATE.
479,541	Williams, C -----	July 26, 1892	489,522	Cahall, W. C -----	Jan. 10, 1893
479,786	Clark, M. M -----	Aug. 2, 1892	489,559	Foote, G. L -----	Jan. 10, 1893
479,887	De Lalande, F -----	Aug. 2, 1892	489,832	Reud, W. R -----	Jan. 10, 1893
480,033	Poppowitsch, E -----	Aug. 2, 1892	489,938	Davis, J. H -----	Jan. 17, 1893
480,384	Dow, H. A -----	Aug. 9, 1892	490,953	Edison, T. A -----	Jan. 31, 1893
481,075	Stieus, P -----	Aug. 16, 1892	494,852	Fitch, D. H -----	Apr. 4, 1893
481,664	Engledue, W. J -----	Aug. 30, 1892	495,827	Weston, E -----	Apr. 4, 1893
482,425	Ekert, T. T -----	Sept. 13, 1892	495,176	Archer, F. M -----	Apr. 11, 1893
482,441	Washburn, W. E -----	Sept. 13, 1892	495,177	Archer, F. M -----	Apr. 11, 1893
483,654	Johnson, H. T -----	Oct. 4, 1892	495,306	Coleman, C. J -----	Apr. 11, 1893
483,692	Lehman, A. J -----	Oct. 4, 1892	495,582	Emme, M -----	Apr. 18, 1893
483,096	Hoffman, J. W -----	Oct. 11, 1892	496,223	Koller, H -----	Apr. 25, 1893
485,089	Carhart, H. S -----	Oct. 25, 1892	496,658	Irving, F. K -----	May 2, 1893
485,319	Crowdus, W. A -----	Nov. 1, 1892	496,743	De Meritens, A. L -----	May 2, 1893
486,264	O'Lalor, J. J -----	Nov. 15, 1892	496,878	Holtzer, C. W -----	May 9, 1893
487,324	Gethins, J. L -----	Dec. 6, 1892	498,422	Burnley, W -----	May 30, 1893
487,839	Johnson, H. T -----	Dec. 13, 1892	500,284	Hayden, M. M -----	June 27, 1893

171. GENERATION.—72. BATTERIES—SECONDARY.

478,230	Gerry, J. H. and Long, C. E -	July 5, 1892	487,644	Rogers, J. S -----	Dec. 6, 1892
478,485	Waldron, C. F -----	July 5, 1892	487,834	Griscom, W. W -----	Dec. 13, 1892
478,661	Tndor, H. -----	July 12, 1892	488,233	Washburn, G. A -----	Dec. 20, 1892
478,664	Van Kerckhove, A -----	July 12, 1892	488,726	Wladimiroff, N -----	Dec. 27, 1892
479,753	Colgate, A. E -----	July 26, 1892	489,115	Arnold, R. C -----	Jan. 3, 1893
479,835	Osburn, H. G -----	Aug. 2, 1892	489,186	Harris, G. W -----	Jan. 3, 1893
480,266	Knowles, E. R -----	Aug. 9, 1892	489,315	Michel, A. M -----	Jan. 3, 1893
480,575	Gandino, G -----	Aug. 9, 1892	490,753	Osburn, H. G -----	Jan. 31, 1893
480,883	Usher, E. P -----	Aug. 16, 1892	491,878	Edgerton, N. H -----	Feb. 14, 1893
480,884	Usher, E. P -----	Aug. 16, 1892	492,422	McLaughlin, J. F -----	Feb. 28, 1893
480,885	Usher, E. P -----	Aug. 16, 1892	493,672	Badt, F. B -----	Mar. 21, 1893
480,886	Usher, E. P -----	Aug. 16, 1892	494,199	Hall, T. G -----	Mar. 28, 1893
480,887	Usher, E. P -----	Aug. 16, 1892	494,849	Elison, C. P -----	Apr. 4, 1893
481,560	Giscom, W. W -----	Aug. 30, 1892	495,107	Coleman, G. D -----	Apr. 11, 1893
482,012	Knowles, E. R -----	Sept. 6, 1892	495,638	Rowley, L. B -----	Apr. 18, 1893
482,043	Kennedy, P. and Diss, C. J -	Sept. 6, 1892	496,126	La Roche, F. A -----	Apr. 25, 1893
482,044	Kennedy, P. and Thorp, C. J -	Sept. 6, 1892	496,517	Hensel, R. T. E -----	May 2, 1893
482,979	Knowles, E. R -----	Sept. 20, 1892	497,869	Dryardin, P. J. R -----	May 23, 1893
483,562	Knowles, E. R -----	Oct. 4, 1892	499,780	Cornig, F. G -----	June 20, 1893
483,563	Knowles, E. R -----	Oct. 4, 1892	499,848	Norton, F. O -----	June 20, 1893
484,120	Silvey, W. L -----	Oct. 11, 1892	500,394	King, F. and Clarke, E -----	June 27, 1893
486,094	Eickemeyer, R. -----	Nov. 15, 1892			

171. GENERATION.—73. BATTERIES—THERMAL.

479,596	Iden, C. W -----	July 26, 1892	483,782	Girand, P -----	Oct. 4, 1892
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171. GENERATION.—23. FRICTION GENERATORS.

479,941	Henry, W. -----	Aug. 2, 1892	497,226	Waite, H. E -----	May 9, 1893
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CLASSIFIED INDEX—ELECTRICITY.

171. GENERATION.—95. GALVANOMETERS.

No.	NAME.	DATE.	No.	NAME.	DATE.
478,097	Evershed, S	July 5, 1892	494,828	Weston, E	Apr. 4, 1893
478,098	Evershed, S	July 5, 1892	494,830	Weston, E	Apr. 4, 1893
479,168	Kennelly, A. E. and Olt, J. F.	July 19, 1892	494,964	Northrup, E. F.	Apr. 4, 1893
480,039	Rudd, C. H.	Aug. 2, 1892	494,961	Koepoel, A.	Apr. 4, 1893
480,888	Weston, E.	Aug. 16, 1892	495,086	Gengenbach, E.	Apr. 11, 1893
480,889	Weston, E.	Aug. 16, 1892	495,225	Lintner, G. A.	Apr. 11, 1893
480,891	Weston, E.	Aug. 16, 1892	496,309	Heinze, J. O., jr.	Apr. 25, 1893
480,894	Weston, E.	Aug. 16, 1892	496,312	Hunter, R. M.	Apr. 25, 1893
480,895	Weston, E.	Aug. 16, 1892	496,500	Weston, E.	May 2, 1893
480,896	Weston, E.	Aug. 16, 1892	496,501	Weston, E.	May 2, 1893
480,897	Weston, E.	Aug. 16, 1892	496,678	Armen, A. H.	May 2, 1893
480,898	Weston, E.	Aug. 16, 1892	497,448	Hoyt, A. H.	May 16, 1893
480,899	Weston, E.	Aug. 16, 1892	497,449	Hoyt, A. H.	May 16, 1893
480,947	Howell, J. W.	Aug. 16, 1892	497,482	Weston, E.	May 16, 1893
481,573	La Roche, F. A.	Aug. 30, 1892	497,521	Hoyt, A. H.	May 16, 1893
482,032	Alcock, A. W.	Sept. 6, 1892	497,522	Hoyt, A. H.	May 16, 1893
483,168	Rudd, C. H.	Sept. 27, 1892	497,529	Fröhlich, O.	May 16, 1893
486,889	Weston, E.	Nov. 22, 1892	497,539	Fröhlich, O.	May 16, 1893
487,093	Noxon, C. P. L.	Nov. 29, 1892	499,313	Weston, E.	June 13, 1893
489,249	Görges, J. H. F.	Jan. 3, 1893	500,236	Kennelly, A. E.	June 27, 1893
490,700	Weston, E.	Jan. 31, 1893	500,264	Hoyt, A. H.	June 27, 1893
490,760	Weston, E.	Jan. 31, 1893	500,404	Luce, W. B.	June 27, 1893
491,457	Willyoung, E. G.	Feb. 7, 1893	500,543	Scott, C. F.	June 27, 1893

171. GENERATION.—122. INDUCTORIUMS—INDUCTION COILS.

482,668	Woolley, L. G.	Sept. 13, 1892	488,299	Willms, C.	Dec. 20, 1892
484,959	Gutmann, L.	Oct. 25, 1892	498,852	Pfannkuche, G. and A.	June 20, 1893

171. GENERATION.—123. INDUCTORIUMS—TRANSFORMERS—ROTARY.

485,669	Thomson, E.	Nov. 8, 1892	495,229	Rice, E. W., jr.	Apr. 11, 1893
492,480	Bradley, C. S.	Feb. 28, 1893	498,537	Dressler, C. E.	May 30, 1893

171. GENERATION.—124. INDUCTORIUMS—TRANSFORMERS—STATIONARY.

484,543	Pyke, L. S. M. and Barnett, H. T.	Oct. 18, 1892	486,916	Thomson, E.	Nov. 29, 1892
484,544	Pyke, L. S. M. and Barnett, H. T.	Oct. 18, 1892			

171. GENERATION.—33. MAGNETO-ELECTRIC.

478,104	Hathaway, M. H.	July 5, 1892	484,785	Evershed, S.	Oct. 25, 1892
478,142	Sperry, E. A.	July 5, 1892	485,220	Pepper, D., jr.	Nov. 1, 1892
478,529	Thomas, C. W.	July 5, 1892	486,078	Bradley, C. S.	Nov. 15, 1892
479,030	Sperry, E. A.	July 19, 1892	486,234	Parcelle, A. L.	Nov. 15, 1892
479,118	Eikemeyer, R.	July 19, 1892	486,524	Baehr, G.	Nov. 22, 1892
479,169	Kennelly, A. E. and Olt, J. F.	July 19, 1892	486,656	Wood, J. J.	Nov. 22, 1892
479,179	Wightman, M. J.	July 19, 1892	487,307	Warner, E. P.	Dec. 6, 1892
479,793	Elkins, W. H.	Aug. 2, 1892	487,462	Wood, J. J.	Dec. 6, 1892
479,802	Haesler, F. J.	Aug. 2, 1892	487,755	Lundell, R.	Dec. 13, 1892
480,049	Warner, E. P.	Aug. 2, 1892	488,016	Lamme, B. G.	Dec. 13, 1892
480,727	Kolben, E.	Aug. 16, 1892	488,978	Ashley, R.	Jan. 3, 1893
480,728	Kolben, E.	Aug. 16, 1892	489,000	Groschwitz, H. and Ashley, R.	Jan. 3, 1893
480,739	Parshall, H. F.	Aug. 16, 1892	489,065	Wood, J. J.	Jan. 3, 1893
480,740	Parshall, H. F.	Aug. 16, 1892	489,070	Daniels, C. F.	Jan. 3, 1893
480,762	Cherry, H. H. and Youngslove, S. D.	Aug. 16, 1892	489,071	Daniels, C. F.	Jan. 3, 1893
			489,302	Golden, W. T. and Atkinson, L. B.	Jan. 3, 1893
480,780	Pfannkuche, G.	Aug. 16, 1892			
481,220	Bradley, C. S. and Wood, J. J.	Aug. 23, 1892	489,185	Goodrich, C. F.	Jan. 3, 1893
11,266	Andrews, W. S. and Spencer, T. (Reis.)	Aug. 30, 1892	490,081	McLaughlin, J. F.	Jan. 17, 1893
			490,183	Billberg, C. O. C.	Jan. 17, 1893
482,265	Nebel, J.	Sept. 6, 1892	490,376	Thomson, E.	Jan. 24, 1893
482,397	Thomson, E.	Sept. 13, 1892	490,460	Wachtel, C.	Jan. 24, 1893
482,825	Eikemeyer, R.	Sept. 20, 1892	490,809	Lundell, R.	Jan. 31, 1893
483,700	Thomson, E.	Oct. 4, 1892	490,810	Lundell, R.	Jan. 31, 1893
483,708	Bassett, N. C.	Oct. 4, 1892	491,106	Hicks, T. H.	Feb. 7, 1893
483,729	Warner, E. P.	Oct. 4, 1892	491,294	Parrot, G. V. M. A. and Reigner, A. C.	Feb. 7, 1893
483,732	Bassett, N. C.	Oct. 4, 1892			
484,724	Smith, A. W.	Oct. 18, 1892	491,490	Morford, T. E.	Feb. 7, 1893

171. GENERATION.—33. MAGNETO-ELECTRIC—Continued.

No.	NAME.	DATE.	No.	NAME.	DATE.
491,567	Kolben, E.-----	Feb. 14, 1893	494,856	Goolden, W. T. and Atkinson, L. B.-----	Apr. 4, 1893
491,568	Kolben, E.-----	Feb. 14, 1893			
491,695	Wood, J. J.-----	Feb. 14, 1893	495,058	Priest, E. D.-----	Apr. 11, 1893
491,708	Jefferson, C. W.-----	Feb. 14, 1893	495,136	Koch, K.-----	Apr. 11, 1893
491,726	Macleod, W. A.-----	Feb. 14, 1893	495,538	Willson, T. L.-----	Apr. 18, 1893
491,811	Patin, O.-----	Feb. 14, 1893	495,561	Paterson, B. S.-----	Apr. 18, 1893
491,990	Dorman, G. E.-----	Feb. 21, 1893	495,562	Perret, F. A.-----	Apr. 18, 1893
492,151	Freeman, W. E.-----	Feb. 21, 1893	495,940	Koedding, W.-----	Apr. 18, 1893
492,176	Williams, J. A.-----	Feb. 21, 1893	495,941	Koedding, W.-----	Apr. 18, 1893
492,244	Smith, A. W.-----	Feb. 21, 1893	496,307	Heinze, J. O., jr.-----	Apr. 25, 1893
492,291	Houghton, E. J. and White, W.-----	Feb. 21, 1893	496,449	Scribner, C. E. and Warner, E. P.-----	May 2, 1893
492,355	Hicks, T. H.-----	Feb. 21, 1893	496,456	Thomson, E. and Rice, E. W., jr.-----	May 2, 1893
492,681	Hoare, G.-----	Feb. 28, 1893	496,514	Fritsche, W.-----	May 2, 1893
492,888	Hunter, R. M.-----	Mar. 7, 1893	496,791	Packard, W. D.-----	May 2, 1893
493,104	Morley, W. M.-----	Mar. 7, 1893	497,001	Crompton, R. E. B.-----	May 9, 1893
493,025	Hassler, R. H.-----	Mar. 7, 1893	497,123	Hassan, M. W.-----	May 9, 1893
493,313	Thomson, E.-----	Mar. 14, 1893	497,361	Thomson, E.-----	May 16, 1893
493,337	Parshall, H. F.-----	Mar. 14, 1893	497,468	Freeman, W. K.-----	May 16, 1893
493,349	Bassett, N. C.-----	Mar. 14, 1893	497,504	Stuart, J. E. and James, W. S.-----	May 16, 1893
493,375	Dunn, G. S.-----	Mar. 14, 1893	497,878	McLaughlin, J. F.-----	May 23, 1893
493,439	Weston, A. W.-----	Mar. 14, 1893	497,888	McLaughlin, J. F.-----	May 23, 1893
493,447	Rollins, G. A.-----	Mar. 14, 1893	498,327	Thomson, E.-----	May 30, 1893
493,679	Brown, H. P.-----	Mar. 21, 1893	498,538	Dressler, C. E.-----	May 30, 1893
493,718	Hellebrandt, S.-----	Mar. 21, 1893	498,969	Dillon, W. S. F.-----	June 6, 1893
493,745	Bain, F.-----	Mar. 21, 1893	499,350	Parshall, H. F.-----	June 13, 1893
494,042	Thomas, W. M.-----	Mar. 21, 1893	499,446	Stanley, W. and Kelley, J. F.-----	June 13, 1893
494,629	Dunn, D. W.-----	Apr. 4, 1893	500,144	Libbey, S. H.-----	June 27, 1893
494,739	Eckstrom, A.-----	Apr. 4, 1893	500,301	Stanley, W. and Kelley, J. F.-----	June 27, 1893
494,836	Baxendale, A. S.-----	Apr. 4, 1893	500,403	Loveridge, F. H.-----	June 27, 1893

171. GENERATION.—118. MAGNETO-ELECTRIC—CONNECTING DEVICES.

494,608	Van Denburgh, N. and Loveridge, F. H.-----	Apr. 4, 1893
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171. GENERATION.—76. MAGNETO-ELECTRIC—HAND MACHINES.

495,138	McLeod, J. N.-----	Apr. 11, 1893	495,139	McLeod, J. N.-----	Apr. 11, 1893
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171. GENERATION.—34. METERS.

478,237	Pattee, H. H.-----	July 5, 1892	490,011	Dibble, F. J.-----	Jan. 17, 1893
479,167	Kennelly, A. E.-----	July 19, 1892	490,279	Frölich, O.-----	Jan. 24, 1893
479,171	Olt, J. F. and Kennelly, A. E.-----	July 19, 1892	490,699	Weston, E.-----	Jan. 31, 1893
479,172	Olt, J. F. and Kennelly, A. E.-----	July 19, 1892	491,560	Hummel, G.-----	Feb. 14, 1893
479,932	Brillie, L. V.-----	Aug. 2, 1892	494,225	Remerfelt, G.-----	Mar. 28, 1893
481,975	Shallenberger, O. B.-----	Sept. 6, 1892	494,513	Stanley, W., jr.-----	Mar. 28, 1893
482,209	Thomson, E.-----	Sept. 6, 1892	494,657	Thomson, M. E.-----	Apr. 4, 1893
482,324	Teague, F.-----	Sept. 6, 1892	494,829	Weston, E.-----	Apr. 4, 1893
483,187	Waterhouse, A. G.-----	Sept. 27, 1892	496,371	Teague, F.-----	Apr. 25, 1893
484,183	Edison, T. A.-----	Oct. 11, 1892	496,728	Edmonson, J. and Oulton, J.-----	May 2, 1893
486,123	Perry, J.-----	Nov. 15, 1892	496,746	Oulton, J. and Edmonson, J.-----	May 2, 1893
487,703	Ayton, C. W.-----	Dec. 13, 1892	496,871	Erickson, O.-----	May 9, 1893
488,107	Ball, J. O.-----	Dec. 13, 1892	498,021	Pattee, H. H.-----	May 23, 1893
489,161	Illig, H.-----	Jan. 3, 1893	498,022	Pattee, H. H.-----	May 23, 1893

171. GENERATION.—125. PYRO-MAGNETS—ELECTRIC DEVICES.

481,999	Berliner, E.-----	Sept. 6, 1892
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171. GENERATION.—40. REGULATORS.

479,886	Krotz, A. S.-----	Aug. 2, 1892	485,181	Elkins, W. H.-----	Nov. 1, 1892
480,393	Vineing, H. E.-----	Aug. 9, 1892	485,239	Thomson, E.-----	Nov. 1, 1892
482,549	Edison, T. A.-----	Sept. 13, 1892	486,214	Lundell, R.-----	Nov. 15, 1892
484,611	Scribner, C. E.-----	Oct. 13, 1892	486,417	Dow, A.-----	Nov. 15, 1892
485,054	Pfannkuche, G.-----	Oct. 25, 1892	486,644	McElroy, J. F.-----	Nov. 22, 1892

171. GENERATION.—40. REGULATORS—Continued.

No.	NAME.	DATE.	No.	NAME.	DATE.
487,816	Badt, F. B -----	Dec. 13, 1892	492,036	Lozier, R. T -----	Feb. 21, 1893
488,121	Houghton, E. J. and White, W	Dec. 13, 1892	492,786	Coyle, A. M -----	Mar. 7, 1893
488,261	Bogue, C. J -----	Dec. 20, 1892	493,544	Henry, J. C -----	June 13, 1893
491,829	Williams, J. A -----	Feb. 14, 1893	499,769	Whittingham, G. H -----	June 20, 1893

171. GENERATION.—119. REGULATORS—ALTERNATING.

479,170	Lemp, H -----	July 19, 1892
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171. GENERATION.—97. SYSTEMS OF DISTRIBUTION.

478,722	Thomson, E -----	July 12, 1892	488,928	Van Depoele, C. J -----	Dec. 27, 1892
486,643	McElroy, J. F -----	Nov. 22, 1892	496,020	Thomson, E -----	Apr. 25, 1893
487,543	Shallenberger, O. B -----	Dec. 6, 1892	496,212	Stanley, W., jr -----	Apr. 25, 1893

172. MOTIVE POWER.—9. CAR BRAKES.

481,842	De Bovet, A -----	Aug. 30, 1892	492,773	Ayres, A. D -----	Mar. 7, 1893
492,492	Fletcher, W. C -----	Feb. 28, 1893	428,624	Clute, N. J -----	May 30, 1893

172. MOTIVE POWER.—15. DENTAL INSTRUMENTS.

480,678	Thomas, C. W -----	Aug. 9, 1892	493,723	Horton, W. P., jr -----	Mar. 21, 1893
493,431	Keller, J -----	Mar. 14, 1893			

172. MOTIVE POWER.—152. ELEVATORS.

478,821	Lee, A. B. and Tyler, W. L -----	July 12, 1892	481,386	Baxter, W., jr -----	Aug. 23, 1892
480,845	Herdman, F. E -----	Aug. 16, 1892	492,160	Herdman, F. E -----	Feb. 21, 1893
480,846	Herdman, F. E -----	Aug. 16, 1892			

172. MOTIVE POWER.—36. MOTORS.

478,475	Secor, J. B -----	July 5, 1892	491,982	Capek, J. V -----	Feb. 21, 1893
478,816	Piat, A -----	July 12, 1892	492,524	Beers, F. H -----	Feb. 28, 1893
478,968	Ong, H. F -----	July 12, 1892	493,361	Immisch, M -----	Mar. 14, 1893
481,646	Beers, F. H -----	Aug. 30, 1892	494,978	Crocker, F. B. and Wheeler, S. S	Apr. 4, 1893
481,701	Lundell, R -----	Aug. 30, 1892	495,547	Fuller, R -----	Apr. 18, 1893
483,431	Dreskell, W. M -----	Sept. 27, 1892	496,945	Morgan, W. H -----	May 9, 1893
483,545	Cutten, E. B -----	Oct. 4, 1892	497,563	Whittier, C. R -----	May 16, 1893
483,582	Ricker, A. L -----	Oct. 4, 1892	498,160	Dyer, F. L. and L. W -----	May 23, 1893
485,221	Pocock, F. A -----	Nov. 1, 1892	498,462	Denison, J. F -----	May 30, 1893
487,242	Beers, F. H -----	Dec. 6, 1892	498,585	Still, W. J -----	May 30, 1893
488,041	Storey, I. E -----	Dec. 13, 1892	499,099	Dahl, O -----	June 6, 1893
490,280	Hausen, J. W -----	Jan. 24, 1893	499,543	Henry, J. C -----	June 13, 1893
490,449	Lundell, R -----	Jan. 24, 1893	500,132	Hunter, R. M -----	June 27, 1893
491,483	Immisch, M -----	Feb. 7, 1893	500,135	Jones, C. S -----	June 27, 1893
491,970	Weston, A. W -----	Feb. 14, 1893	500,400	Lange, P -----	June 27, 1893

172. MOTIVE POWER.—120. MOTORS—ALTERNATING.

479,187	Hicks, T. H -----	July 19, 1892	483,816	Stanley, W. and Kelley, J. F --	Oct. 4, 1892
479,675	Stanley, W., jr., and Kelley, J. F	July 26, 1892	488,305	Bradley, C. S -----	Dec. 20, 1892
479,676	Stanley, W., jr., and Kelley, J. F	July 26, 1892	488,306	Bradley, C. S -----	Dec. 20, 1892
479,727	Stanley, W., jr., and Kelley, J. F	July 26, 1892	497,110	Winand, P. A. N. and Billberg,	May 9, 1893
479,746	Kelley, J. F. and Stanley, W., jr	July 26, 1892		C. O. C -----	
482,974	Blathy, O. T -----	Sept. 20, 1892	487,113	Blathy, O. T -----	May 9, 1893

172. MOTIVE POWER.—179. MOTORS—HAND OPERATING DEVICES.

481,297	Clark, J. H -----	Aug. 23, 1892	486,213	Lundell, R -----	Nov. 15, 1892
481,739	Sprague, F. J -----	Aug. 30, 1892	487,092	Nate, J. J -----	Nov. 29, 1892
485,619	Fiske, J. P. B -----	Nov. 8, 1892	489,687	Olt, J. F. and Kennelly, A. E --	Jan. 10, 1893
485,620	Fiske, J. P. B -----	Nov. 8, 1892	492,456	Berry, F. H -----	Feb. 28, 1893

172. MOTIVE POWER.—179. MOTORS—HAND OPERATING DEVICES—Continued.

No.	NAME.	DATE.	No.	NAME.	DATE.
493,485	Coyle, A. M -----	Mar. 14, 1893	496,522	Mason, D -----	May 2, 1893
494,565	Hill, W. S -----	Apr. 4, 1893	497,144	Teal, L -----	May 9, 1893
494,781	Hill, W. S -----	Apr. 4, 1893	500,274	See, A. B. and Tyler, W. L -----	June 27, 1893
496,382	Moore, C. E -----	Apr. 25, 1893			

172. MOTIVE POWER.—126. MOTORS—RECIPROCATING.

479,948	Loomis, F. F -----	Aug. 2, 1892	495,046	Knoche, A -----	Apr. 11, 1893
494,053	Birkin, W. A. G -----	Mar. 21, 1893	496,331	Van Depoele, C. J -----	Apr. 25, 1893

172. MOTIVE POWER.—8. STEERING AND PROPULSION.

479,828	Mumford, E. H -----	Aug. 2, 1892	493,000	Van Duzer, L. S -----	Mar. 7, 1893
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172. MOTIVE POWER.—83. TRANSMISSION OF POWER.

478,344	Lenard, H. W -----	July 5, 1892	484,549	Brace, De Witt B -----	Oct. 18, 1892
479,951	Marvin, H. N -----	Aug. 2, 1892	485,658	Rice, E. W., jr -----	Nov. 8, 1892
479,960	Van Depoele, C. J -----	Aug. 2, 1892	485,659	Rice, E. W., jr -----	Nov. 8, 1892
479,962	Van Depoele, C. J -----	Aug. 2, 1892	487,796	Tesla, N -----	Dec. 13, 1892
479,963	Van Depoele, C. J -----	Aug. 2, 1892	489,709	Hering, C -----	Jan. 10, 1893
479,964	Van Depoele, C. J -----	Aug. 2, 1892	491,465	Bradley, C. S -----	Feb. 7, 1893
479,966	Van Depoele, C. J -----	Aug. 2, 1892			

173. CONDUCTORS.—81. ANTI-INDUCTIVE.

478,367	Sawyer, W. H -----	July 5, 1892
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173. CONDUCTORS.—13. CONDUCTORS.

478,629	McTighe, T. J -----	July 12, 1892	484,045	Perrine, F. A. C -----	Oct. 11, 1892
479,322	Wollensack, J. F -----	July 19, 1892	486,270	Barrett, J. A -----	Nov. 15, 1892
479,525	Perrine, F. A. C -----	July 26, 1892	488,141	Cuttriss, C -----	Dec. 13, 1892
481,912	Noll, A -----	Aug. 30, 1892	490,034	Morford, T. E -----	Jan. 17, 1893
481,913	Noll, A -----	Aug. 30, 1892	11,303	Morford, T. E ----- (Reis.)	Feb. 7, 1893
482,753	Reed, T. L -----	Sept. 20, 1892	492,301	Keckeley, W. H -----	Feb. 21, 1893
483,074	Marsh, J. W -----	Sept. 20, 1892	497,336	Patterson, W. R -----	May 16, 1893
483,285	Guilleaume, T -----	Sept. 27, 1892	498,757	Attix, T. F -----	June 6, 1893

173. CONDUCTORS.—94. LEAD COVERED.

479,386	Bennett, M -----	July 19, 1892
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173. CONDUCTORS.—70. CONDUCTORS—UNDERGROUND.

479,397	Bradley, S. R -----	July 26, 1892	491,707	Jefferson, C. W -----	Feb. 14, 1893
480,573	Flagg, S. H -----	Aug. 9, 1892	497,535	Cummings, J. F -----	May 16, 1893
482,270	O'Connor, T. F. and Marsh, J. W -----	Sept. 6, 1892	497,536	Cummings, J. F -----	May 16, 1893
488,027	Purcell, J. J -----	Dec. 13, 1892	497,601	Powers, J. J. and Van Buren, R -----	May 16, 1893
488,198	Hart, W. H -----	Dec. 20, 1892	497,852	Wright, P -----	May 23, 1893
490,630	Ransome, E. L -----	Jan. 24, 1893			

173. CONDUCTORS.—14. CONNECTORS.

478,140	Sperry, E. A -----	July 5, 1892	483,327	Purcell, J. J -----	Sept. 27, 1892
479,325	Gill, W. E -----	July 19, 1892	490,755	Russell, G. L -----	Jan. 31, 1893
480,152	Tobey, C. W -----	Aug. 2, 1892	492,811	Kissinger, W. S -----	Mar. 7, 1893
481,025	Harrington, W. E -----	Aug. 16, 1892	498,407	Rich, R. H -----	May 30, 1893
481,914	Noll, A -----	Aug. 30, 1892	499,090	Bodine, J -----	June 6, 1893
482,181	Kellom, C. F -----	Sept. 6, 1892	499,254	Sargent, H -----	June 13, 1893

173. CONDUCTORS.—28. INSULATORS.

No.	NAME.	DATE.	No.	NAME.	DATE.
479,134	Conover, C. E	July 19, 1892	490,560	Hauty, A. J	Jan. 24, 1893
480,011	Green, J. J	Aug. 2, 1892	491,208	Edmunds, W. H	Feb. 7, 1893
481,132	Bowen, W. J	Aug. 16, 1892	491,362	Lane, A. R	Feb. 7, 1893
481,457	Wylie, A. J	Aug. 23, 1892	491,729	McCarthy, L	Feb. 14, 1893
482,297	Clark, W. H	Sept. 6, 1892	491,890	Johnston, A. L	Feb. 14, 1893
482,872	Lee, C. T	Sept. 20, 1892	492,394	Eichberg, W. N	Feb. 28, 1893
482,913	Brooks, H. H	Sept. 20, 1892	493,434	Locke, F. M	Mar. 14, 1893
483,771	Seymour, A. P	Oct. 4, 1892	495,552	Hills, L	Apr. 18, 1893
483,806	Hull, W. S	Oct. 4, 1893	496,081	Wright, J. F	Apr. 25, 1893
484,209	Locke, F. M	Oct. 11, 1892	496,652	Hemingray, R. G. and Gill, J. C	May 2, 1893
488,046	Wirt, C	Dec. 13, 1892	497,439	Wylie, A. J	May 16, 1893
489,658	McCarthy, L	Jan. 10, 1893	497,515	Brady, T. H	May 16, 1893
490,302	McCarthy, L	Jan. 24, 1893			

173. CONDUCTORS.—31. LIGHTNING RODS.

492,512	Hum, E. K	Feb. 28, 1893	494,286	Bartlett, J. B. L	Mar. 28, 1893
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173. CONDUCTORS.—43. RHEOSTATS.

478,276	Eayrs, W. P	July 5, 1892	487,306	Waring, J	Dec. 6, 1892
479,101	Waring, J	July 19, 1892	492,757	Carpenter, C. E	Feb. 28, 1893
480,151	Tobey, C. W	Aug. 2, 1892	492,758	Carpenter, C. E	Feb. 28, 1893
480,892	Weston, E	Aug. 16, 1892	497,366	Wright, P	May 16, 1893
480,893	Weston, E	Aug. 16, 1892	498,799	Knowles, E. R	June 6, 1893
481,781	Carpenter, C. E	Aug. 30, 1892	500,362	Weston, E	June 27, 1893
481,093	Lawrence, H. W	Sept. 6, 1892			

174. MEDICAL AND SURGICAL.—87. BATHS.

485,238	Thomas, E. M				Nov. 1, 1892
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174. MEDICAL AND SURGICAL.—88. BODY-WEAR.

478,293	Simpson, F	July 5, 1892	488,013	Kjorstad, O	Dec. 13, 1892
479,147	Andrus, D. P	July 19, 1892	490,891	Ahearn, T	Jan. 31, 1893
479,410	Eklund, A. M	July 26, 1892	490,948	Cummings, J. W	Jan. 31, 1893
485,754	Teft, E. N	Nov. 8, 1892	495,861	Webb, G. F	Apr. 18, 1893
486,902	Shults, J. W	Nov. 29, 1892	496,244	Barrett, F. A	Apr. 25, 1893
487,185	Johnson, J. H	Nov. 29, 1892	497,822	Roger, H. C	May 23, 1893

174. MEDICAL AND SURGICAL.—89. ELECTRODES.

490,678	Price, W. A	Jan. 31, 1893	500,172	Washburn, W. E	June 27, 1893
490,679	Price, W. A	Jan. 31, 1893	500,539	Hodgkinson, T. C	June 27, 1893

174. MEDICAL AND SURGICAL.—172. CHAIRS AND COUCHES.

499,681	Renstrom, N. A				June 13, 1893
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174. MEDICAL AND SURGICAL.—173. COMBS AND BRUSHES.

479,321	Williams, R. E	July 19, 1892	494,359	Williams, R. E	Mar. 28, 1893
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174. MEDICAL AND SURGICAL. 177. MEDICAL AND SURGICAL.

487,655	Wandell, J. M	Dec. 6, 1892	494,520	Boyd, B. Y	Mar. 28, 1893
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174. MEDICAL AND SURGICAL.—174. ELECTRIC SOLES.

495,782	Carnes, R. F				Apr. 18, 1893
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174. MEDICAL AND SURGICAL.—175. EXERCISING APPARATUS.

No.	NAME.	DATE.	No.	NAME.	DATE.
484,618	Smith, S. D -----	Oct. 18, 1892	493,997	Harteluis, C. E -----	Mar. 21, 1893

175. SPECIAL APPLICATIONS.—4. APPLICATIONS—GENERAL.

482,902	Guerrant, G. M -----	Sept. 20, 1892	483,725	Rogers, C. W -----	Oct. 4, 1892
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175. SPECIAL APPLICATIONS. 5. APPLICATIONS—TOOLS AND MACHINES.

481,988	Weyburn, E. D -----	Sept. 6, 1892	495,071	Thomson, E -----	Apr. 11, 1893
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175. SPECIAL APPLICATIONS.—21. ELECTRO-MAGNETS.

479,804	Hatch, E. B. and Colton, C. A -	Aug. 2, 1892	495,026	Demmick, G. W -----	Apr. 11, 1893
480,681	Wheeler, S. S -----	Aug. 9, 1892	495,125	Stupakoff, S. H -----	Apr. 11, 1893
486,926	Buck, H. C -----	Nov. 29, 1892	496,648	Gregory, F. L -----	May 2, 1893
489,277	Varley, R., jr -----	Jan. 3, 1893	498,763	Callender, R. -----	June 6, 1893
491,491	Morford, T. E -----	Feb. 7, 1893			

175. SPECIAL APPLICATIONS.—16. HEATERS.

479,814	Kennedy, R -----	Aug. 2, 1892	483,940	Perkins, F. B. and Jones, C. S -	Oct. 4, 1892
480,392	Thomson, E -----	Aug. 9, 1892	484,182	Dewey, M. W -----	Oct. 11, 1892
481,291	Ahearn, T. -----	Aug. 23, 1892	484,532	Gardner, A. D -----	Oct. 18, 1892
482,074	Capek, J. V -----	Sept. 6, 1892	484,574	Venker, J. B -----	Oct. 18, 1892
483,124	Ahearn, T. -----	Sept. 27, 1892	487,285	Mitchell, W -----	Dec. 6, 1892
483,755	Appleyard, A. E -----	Oct. 4, 1892	491,484	Jenkins, S. B -----	Feb. 7, 1893
483,759	Appleyard, A. E -----	Oct. 4, 1892			

175. SPECIAL APPLICATIONS.—168. HEATING—METAL WORKING.

478,643	Scott, E. H -----	July 12, 1892	488,469	Burton, G. D. and Angell, E. E -	Dec. 20, 1892
478,644	Scott, E. H -----	July 12, 1892	489,114	Arnold, R. C -----	Jan. 3, 1893
480,794	Unwin, P. J. and Howard, H -	Aug. 16, 1892	491,437	Mitchell, W -----	Feb. 7, 1893
481,030	Howard, H -----	Aug. 16, 1892	491,438	Mitchell, W -----	Feb. 7, 1893
482,139	Roberts, E. F -----	Sept. 6, 1892	492,713	Coffin, C. L -----	Feb. 28, 1893
483,423	Coffin, C. L -----	Sept. 27, 1892	495,393	Coffin, C. L -----	Apr. 11, 1893
483,424	Coffin, C. L -----	Sept. 27, 1892	495,394	Coffin, C. L -----	Apr. 11, 1893
483,425	Coffin, C. L -----	Sept. 27, 1892	496,019	Thomson, E -----	Apr. 25, 1893
483,426	Coffin, C. L -----	Sept. 27, 1892	496,591	Burton, G. D. and Angell, E. E -	May 2, 1893
483,427	Coffin, C. L -----	Sept. 27, 1892	496,592	Burton, G. D -----	May 2, 1893
483,423	Coffin, C. L -----	Sept. 27, 1892	496,593	Burton, G. D -----	May 2, 1893
486,176	Burton, G. D. and Angell, E. E -	Nov. 15, 1892	496,594	Burton, G. D -----	May 2, 1893
486,624	Burton, G. D. and Angell, E. E -	Nov. 22, 1892	496,775	Burton, G. D. and Angell, E. E -	May 2, 1893
486,625	Burton, G. D -----	Nov. 22, 1892	496,890	Moxham, A. J -----	May 9, 1893
486,626	Burton, G. D. and Angell, E. E -	Nov. 22, 1892	497,808	Moxham, A. J -----	May 23, 1893
486,627	Burton, G. D. and Angell, E. E -	Nov. 22, 1892	498,735	Bassler, J. H -----	May 30, 1893
486,818	Burton, G. D -----	Nov. 22, 1892	499,040	Ries, E. E -----	June 6, 1893
487,302	Thomson, E -----	Dec. 6, 1892	499,277	Bassler, J. H -----	June 13, 1893
487,607	Coffin, C. L -----	Dec. 6, 1892	499,518	Coffin, C. L -----	June 13, 1893
488,466	Burton, G. D. and Angell, E. E -	Dec. 20, 1892	499,519	Coffin, C. L -----	June 13, 1893
488,467	Burton, G. D. and Angell, E. E -	Dec. 20, 1892	499,657	Coffin, C. L -----	June 13, 1893
488,468	Burton, G. D. and Angell, E. E -	Dec. 20, 1892	499,964	Burton, G. D. and Angell, E. E -	June 20, 1893

175. SPECIAL APPLICATIONS.—170. HEATING—SOLDERING.

478,201	Mitchell, W -----	July 5, 1892	488,871	Coffin, C. L -----	Dec. 27, 1892
485,017	Ries, E. E -----	Oct. 25, 1892	488,872	Coffin, C. L -----	Dec. 27, 1892

175. SPECIAL APPLICATIONS.—21. IGNITING DEVICES.

496,103	Smith, L. T -----	Apr. 25, 1893	497,404	Carstarphen, W. P -----	May 16, 1893
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175. SPECIAL APPLICATIONS.—115. IGNITING DEVICES—AUTOMATIC.

No.	NAME.	DATE.	No.	NAME.	DATE.
488,012	Kilbourn, L. M. and Van Etten, S.	Dec. 13, 1892	498,492	Sangster, J	May 30, 1893

175. SPECIAL APPLICATIONS.—116. IGNITING DEVICES—MANUAL.

478,522	Quinn, D. J. and Hoffman, P. N	July 5, 1892	495,929	Carter, W. and Willey, C. E	Apr. 18, 1893
481,692	Eastman, W. J	Aug. 30, 1892	496,618	Quinn, D. J. and Hoffman, P. W	May 2, 1893
482,172	Hamilton, J. E	Sept. 6, 1892	497,263	Carstarphen, W. P., jr	May 9, 1893
488,889	Guthberlet, E. T. and Isard, W. R	Dec. 27, 1892	499,297	Lane, T. W. and Lee, C. E	June 13, 1893
489,616	Sloss, A. M	Jan. 10, 1893	499,298	Lane, T. W. and Lee, C. E	June 13, 1893
489,653	Lane, T. W	Jan. 10, 1893	499,596	Russell, W. H. and G. E	June 13, 1893
492,913	Chambers, J. C	Mar. 7, 1893	500,192	Clewley, W. H	June 27, 1893
494,091	Thomas, W. M	Mar. 21, 1893	500,357	Tropp, B.	June 27, 1893

175. SPECIAL APPLICATIONS.—90. SEPARATORS.

478,551	Ball, C. M. and Norton, S	July 12, 1892	485,842	Edison, T. A	Nov. 8, 1892
481,474	Conkling, G	Aug. 23, 1892	486,879	Lovett, T. J	Nov. 29, 1892
482,323	Seymour, C. E	Sept. 6, 1892	487,073	Lovett, T. J	Nov. 29, 1892
484,877	Eames, H. H	Oct. 25, 1892	487,074	Lovett, T. J	Nov. 29, 1892
485,841	Edison, T. A	Nov. 8, 1892	488,564	Chase, H. C	Dec. 13, 1892

175. SPECIAL APPLICATIONS.—84 VALVE CONTROLLERS.

479,761	Kilbourn, W. H	July 26, 1892	483,108	Franke, A	Sept. 20, 1892
479,795	Fortier, C. L	Aug. 2, 1892	489,424	Tirrell, J. P	Jan. 3, 1893

176. ELECTRIC LIGHTING.—80. CUT-OUTS—ELECTRO-MAGNETIC.

481,617	Freeman, J. P	Aug. 30, 1892	492,807	Irish, D. and Williams, J. G	Mar. 7, 1893
482,374	Mailloux, C. O	Sept. 13, 1892	493,009	Bedell, C. H	Mar. 7, 1893
483,123	Russell, G. W. and Minor, D. B	Sept. 20, 1892	494,995	Adair, B. and Klewer, C. H	Apr. 4, 1893
484,865	Sanford, C. E	Oct. 25, 1892	500,456	Wurts, A	June 27, 1893
488,899	Painter, G. E	Dec. 27, 1892			

176. ELECTRIC LIGHTING.—79. CUT-OUTS—MECHANICAL.

478,689	Cleveland, W. B	July 12, 1892	488,740	Pattison, C. E	Dec. 27, 1892
478,718	Short, S. H	July 12, 1892	490,178	Thomson, E	Jan. 17, 1893
480,948	Hutchinson, J	Aug. 16, 1892	490,363	Rohrer, A. L	Jan. 24, 1893
483,712	Eckstrom, A	Oct. 4, 1892	490,762	Bentley, E. M	Jan. 31, 1893
483,713	Eckstrom, A	Oct. 4, 1892	494,610	Webb, G. W	Apr. 4, 1893
484,380	Utley, M. R	Oct. 11, 1892	499,770	Willis, D. J	June 20, 1893

176. ELECTRIC LIGHTING.—154. CUT-OUTS—MECHANICAL—OSCILLATING SNAP.

480,722	Goold, F. D'A	Aug. 16, 1892	494,750	Ball, H. P	Apr. 4, 1893
482,936	Wright, A	Sept. 20, 1892	496,807	Wright, A	May 2, 1893
489,553	Baehr, G	Jan. 10, 1893	496,808	Wright, A	May 2, 1893
489,668	Goold, F. D'A	Jan. 10, 1893	498,880	Des Brisay, J	June 6, 1893
489,674	Goold, F. D'A	Jan. 10, 1893	499,646	Russell, G. W	June 13, 1893
493,243	Bossert, W. F	Mar. 14, 1893	499,930	Persson, O. F	June 20, 1893

176. ELECTRIC LIGHTING.—178. CUT-OUTS—MECHANICAL—OSCILLATING SPRING.

486,241	Warner, E. P	Nov. 15, 1892	500,423	Pfluger, C. A	June 27, 1893
486,987	Schultz, W. J	Nov. 29, 1892			

176. ELECTRIC LIGHTING.—155. CUT-OUTS—MECHANICAL—ROTARY.

479,821	Lundberg, A. P	Aug. 2, 1892	486,215	Lundell, R	Nov. 15, 1892
479,949	Loomis, F. F	Aug. 2, 1892	490,746	Gibbs, J. S	Jan. 31, 1893
480,694	Gibbs, J. S	Aug. 9, 1892	497,756	Woltmann, E. and Triggs, H. A	May 16, 1893
483,316	Alden, S. F	Sept. 27, 1892	499,363	McElroy, J. F	June 13, 1893
483,704	Armstrong, D. H	Oct. 4, 1892	500,199	George, J. S., jr	June 27, 1893
483,862	Paiste, H. T	Oct. 4, 1892	500,200	George, J. S., jr	June 27, 1893
485,558	O'Neill, J. O	Nov. 1, 1892	500,201	George, J. S., jr	June 27, 1893

176. ELECTRIC LIGHTING.—156. CUT-OUTS—MECHANICAL—SLIDING.

No.	NAME.	DATE.	No.	NAME.	DATE.
480,782	Quirk, M. J. and Bach, C., jr	Aug. 16, 1892	483,235	McMunn, L. D	Sept. 27, 1892

176. ELECTRIC LIGHTING.—78. CUT-OUTS—THERMAL.

480,651	Baumhoff, G. W	Aug. 9, 1892	493,380	Hammarström, E. F	Mar. 14, 1893
480,745	Robb, J. T	Aug. 16, 1892	493,629	Lemp, H. and Wightmann, M. J	Mar. 21, 1893
480,802	Blathy, O. T	Aug. 16, 1892	495,038	Hill, W. S	Apr. 11, 1893
484,545	Stanley, W. and Kelman, J. H.	Oct. 18, 1892	495,318	Faben, T. H	Apr. 11, 1893
484,822	Rhodes, H. A	Oct. 25, 1892	496,308	Heinze, J. O., jr	Apr. 25, 1893
488,123	Keating, H. S	Dec. 13, 1892	497,732	Stupakoff, S. H	May 16, 1893
489,364	Bossert, W. F	Jan. 3, 1893	497,844	Walls, M. C	May 23, 1893
489,933	Potter, W. B	Jan. 17, 1893	497,956	Frei, G. A	May 23, 1893
490,292	Leavy, M	Jan. 24, 1893	498,560	Mashinter, W. P	May 30, 1893
490,477	Hutchinson, J	Jan. 24, 1893	499,425	Haskins, C. D	June 13, 1893
490,917	Morris, E. P	Jan. 31, 1893	499,485	Voorhees, G. T	June 13, 1893
491,992	Edison, T. A	Feb. 21, 1893	499,614	Voorhees, G. T	June 13, 1893
492,547	Wurts, A	Feb. 28, 1893	499,664	Fay, T. J	June 13, 1893
492,649	Wheatley, T. W	Feb. 28, 1893	500,229	Egger, E	June 27, 1893
493,328	Bonebrake, L. P	Mar. 14, 1893	500,248	Young, S. A. and Alden, C	June 27, 1893
493,369	Stromberg, A	Mar. 14, 1893			

176. ELECTRIC LIGHTING.—110. LIGHTS—ARC AND INCANDESCENT.

479,183	Dobbie, R. S	July 19, 1892	496,702	Sanders, J. F. and S. J	May 2, 1893
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176. ELECTRIC LIGHTING.—105. LIGHTS—ARC, GRAVITY FEED, CLUTCH.

479,029	Sperry, E. A	July 19, 1892	491,095	Freeman, W. E	Feb. 7, 1893
479,121	Irish, W. E	July 19, 1892	491,251	Scribner, C. E	Feb. 7, 1893
480,050	Warner, E. P	Aug. 2, 1892	491,603	Scribner, C. E	Feb. 14, 1893
480,525	Sperry, E. A	Aug. 9, 1892	491,604	Scribner, C. E	Feb. 14, 1893
480,721	Goold, F. D'A	Aug. 16, 1892	491,605	Scribner, C. E	Feb. 14, 1893
481,677	Scribner, C. E	Aug. 30, 1892	492,815	McFadden, G. K	Mar. 7, 1893
482,253	Kester, J. T	Sept. 6, 1892	493,360	Hunter, R. M	Mar. 14, 1893
484,199	Hayes, J. A	Oct. 11, 1892	495,077	Waterhouse, A. G	Apr. 11, 1893
485,293	Mosher, J. A	Nov. 1, 1892	495,643	Turbayne, W. A	Apr. 18, 1893
486,377	Higham, D	Nov. 15, 1892	496,386	Akester, W. H	Apr. 25, 1893
486,757	Brockie, J	Nov. 22, 1892	497,438	Wray, J. C	May 16, 1893
486,958	Scribner, C. E	Nov. 29, 1892	497,450	Hunter, R. M	May 16, 1893
488,585	Thomson, E	Dec. 27, 1892	498,566	Nordmann, P	May 30, 1893
488,696	Odell, H. M	Dec. 27, 1892	499,676	Hunter, R. M	June 13, 1893
490,992	Snyden, J. and Sandy, W. J. L.	Jan. 31, 1893	500,422	Pfuger, C. A	June 27, 1893

176. ELECTRIC LIGHTING.—106. LIGHTS—ARC, GRAVITY FEED, GEAR-CLUTCH.

479,007	Logan, M. S	July 19, 1892	488,329	De Puydt, A	Dec. 20, 1892
480,285	Schmit, C	Aug. 9, 1892	491,548	Goold, F. D'A	Feb. 14, 1893
480,963	Schefbauer, R	Aug. 16, 1892	491,915	Akester, W. H	Feb. 14, 1893
482,435	Cutter, H. H	Sept. 13, 1892	491,916	Akester, W. H	Feb. 14, 1893
482,568	Bigland, H. H. and Burns, J.	Sept. 13, 1892	492,124	Ward, B. B	Feb. 21, 1893
482,936	Stuart, J. A	Sept. 20, 1892	492,650	Wiemann, W. P	Feb. 28, 1893
484,530	Coerper, C	Oct. 13, 1892	495,601	Schmidt, F. T	Apr. 18, 1893
485,327	Knowles, E. R	Nov. 1, 1892	495,772	Bleauvalet, E. E. and L. C	Apr. 18, 1893
485,347	Jappy, H. and Helmer, O	Nov. 1, 1892	496,387	Akester, W. H	Apr. 25, 1893
485,744	Kirkegaard, G	Nov. 8, 1892	426,409	Hansen, F	May 2, 1893
485,895	Steers, J. R	Nov. 8, 1892	500,341	Mathiesen, W	June 27, 1893
487,315	Wood, J. J	Dec. 6, 1892			

176. ELECTRIC LIGHTING.—111. LIGHTS—ARC, NON-FEEDING.

498,387	Goold, F. D'A	May 30, 1893
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176. ELECTRIC LIGHTING.—107. LIGHTS—ARC, POSITIVE FEED.

493,739	Thomson, E	Mar. 21, 1893
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176. ELECTRIC LIGHTING.—109. LIGHTS—ARC, POSITIVE FEED, GEAR-CLUTCH.

No.	NAME.	DATE.	No.	NAME.	DATE.
478,145	Thomson, E -----	July 5, 1892	489,046	Thomson, E -----	Jan. 3, 1893
478,510	Hunter, R. M -----	July 5, 1892	492,312	Thomson, J -----	Feb. 21, 1893
479,510	Irish, W. E -----	July 26, 1892	495,649	Adams, C. F -----	Apr. 18, 1893
482,157	Birch, J. T -----	Sept. 6, 1892	496,882	Krueger, M -----	May 9, 1893
482,240	Gaston, J. E -----	Sept. 6, 1892	497,494	Einstein, J -----	May 16, 1893
486,488	Meissner, W. O -----	Nov. 22, 1892	498,269	Hills, L. -----	May 30, 1893

176. ELECTRIC LIGHTING.—112. LIGHTS—ARC, SPECIAL FEATURES.

478,274	Decron, W. E -----	July 5, 1892	484,480	Ward, B. B -----	Oct. 18, 1892
479,017	Pfluger, C. A -----	July 19, 1892	484,964	Hills, L. -----	Oct. 25, 1892
479,659	Pierce, J. A -----	July 26, 1892	491,124	McLaughlin, J. -----	Feb. 7, 1893
480,539	Wright, A -----	Aug. 9, 1892	492,008	Goold, F. D'A -----	Feb. 21, 1893
480,915	Buffinton, E. N -----	Aug. 16, 1892	493,359	Hunter, R. M -----	Mar. 14, 1893
481,381	Wright, A -----	Aug. 23, 1892	494,499	Turbayne, W. A -----	Mar. 28, 1893
482,104	Stieringer, L -----	Sept. 6, 1892	495,461	Hunter, R. M -----	Apr. 11, 1893
482,535	Weber, A -----	Sept. 13, 1892	497,104	Turbayne, W. A -----	May 9, 1893
482,727	Dillon, T -----	Sept. 20, 1892	497,200	Nortney, J. and Shefold, F -----	May 9, 1893
482,820	Warner, E. P -----	Sept. 20, 1892	497,898	Scribner, C. E -----	May 23, 1893
482,940	Bossert, W. F. and Findlay, J. H -----	Sept. 20, 1892	500,421	Pfluger, C. A -----	June 27, 1893

176. ELECTRIC LIGHTING.—102. LIGHTS—FILAMENTS AND CARBONS.

482,177	Holmes, P. H -----	Sept. 6, 1892	492,150	Edison, T. A -----	Feb. 21, 1893
484,184	Edison, T. A -----	Oct. 11, 1892	494,149	De Lodyguine, A -----	Mar. 28, 1893
484,185	Edison, T. A -----	Oct. 11, 1892	494,150	De Lodyguine, A -----	Mar. 28, 1893
484,553	Jones, L. L -----	Oct. 18, 1892	494,151	De Lodyguine, A -----	Mar. 28, 1893
485,615	Edison, T. A -----	Nov. 8, 1892	495,463	Lane, G. M -----	Apr. 11, 1893
485,616	Edison, T. A -----	Nov. 8, 1892	495,761	Sanders, J. F. and S. J. -----	May 2, 1893
485,617	Edison, T. A -----	Nov. 8, 1892	498,141	Siebold, A. C -----	May 23, 1893
487,046	Clegg, J. -----	Nov. 29, 1892	498,915	Heinmann, S -----	June 6, 1893
487,220	Hazeltine, C. W -----	Nov. 29, 1892	500,279	Criggal, J -----	June 27, 1893
488,256	Stevens, N. P -----	Dec. 20, 1892			

176. ELECTRIC LIGHTING.—18. LIGHTS—INCANDESCENT.

479,360	Green, H -----	July 19, 1892	494,531	Moore, McF. D -----	Mar. 28, 1893
480,284	Scharf, P -----	Aug. 9, 1892	495,240	Benjamin, G. H -----	Apr. 11, 1893
480,954	Melick, G. F -----	Aug. 16, 1892	495,467	Green, H -----	Apr. 11, 1893
481,047	McQuat, E -----	Aug. 16, 1892	495,620	Applegate, E. W -----	Apr. 18, 1893
484,825	Smith, F. S -----	Oct. 25, 1892	497,038	Waring, J -----	May 9, 1893
485,478	Pollard, E -----	Nov. 1, 1892	497,957	Frei, G. A -----	May 23, 1893
485,682	Carey, A. C -----	Nov. 8, 1892	498,878	Colby, E. A -----	June 6, 1893
486,457	Frei, G. A -----	Nov. 22, 1892	498,879	Colby, E. A -----	June 6, 1893
487,049	Görge, J. H. F -----	Nov. 29, 1892	498,901	De Lodyguine, A -----	June 6, 1893
487,360	Applegate, E. W -----	Dec. 6, 1892	498,929	Colby, F. A -----	June 6, 1893
487,477	Frei, G. A -----	Dec. 6, 1892	499,097	Colby, F. A -----	June 6, 1893
487,478	Frei, G. A -----	Dec. 6, 1892	499,916	Frei, G. A -----	June 20, 1893
487,890	Paathonier, C -----	Dec. 13, 1892	500,053	Cary, E. E -----	June 20, 1893
488,139	Applegate, E. W -----	Dec. 13, 1892	500,075	Nickerson, W. E -----	June 20, 1893
488,635	Prentiss, F. H -----	Dec. 27, 1892	500,076	Nickerson, W. E -----	June 20, 1893
488,636	Prentiss, F. H -----	Dec. 27, 1892	500,077	Nickerson, W. E. and Cary, E. E -----	June 20, 1893
490,903	Gartland, F. X -----	Jan. 31, 1893	500,078	Nickerson, W. E -----	June 20, 1893
492,809	Von der Kammer, J -----	Mar. 7, 1893	500,079	Nickerson, W. E -----	June 20, 1893

176. ELECTRIC LIGHTING.—113. LIGHTS—INCANDESCENT—SPECIAL FEATURES.

478,417	Drew, H. P -----	July 5, 1892	484,483	Wirt, C -----	Oct. 18, 1892
479,020	Richter, M. A. and Nolen, J. G -----	July 19, 1892	487,022	Pfouts, L. S -----	Nov. 29, 1892
479,139	Miller, J. J -----	July 19, 1892	488,878	Noran, W -----	Dec. 27, 1892
480,749	Stanley, L. T -----	Aug. 16, 1892	488,946	O'Neill, J. A -----	Dec. 27, 1892
480,787	Scott, W -----	Aug. 16, 1892	489,861	Bennett, G. H -----	Jan. 10, 1893
480,813	Enos, A. T -----	Aug. 16, 1892	491,682	Halvorson, C. A. B. -----	Feb. 14, 1893
481,246	Seymour, A. P -----	Aug. 23, 1892	491,713	Main, W -----	Feb. 14, 1893
481,814	Overholt, F -----	Aug. 30, 1892	492,215	Larkins, S. O -----	Feb. 21, 1893
482,339	Crolus, E. R -----	Sept. 13, 1892	492,808	Jenkins, N -----	Mar. 7, 1893
482,486	Pfluger, C. A -----	Sept. 13, 1892	492,847	Stevens, T. E -----	Mar. 7, 1893
484,450	Page, D. S -----	Oct. 18, 1892	493,411	Robb, J. T -----	Mar. 14, 1893

176. ELECTRIC LIGHTING.—113. LIGHTS—INCANDESCENT—SPECIAL FEATURES—Continued.

No.	NAME.	DATE.	No.	NAME.	DATE.
493,755	Crockett, C. H. and Allen, C. C.	Mar. 21, 1893	496,792	Peeples, G	May 2, 1893
493,868	Hutchinson, J	Mar. 21, 1893	497,251	Peeples, G	May 9, 1893
493,883	Ballet, E	Mar. 21, 1893	497,540	Di Giovanni, G. G	May 16, 1893
495,513	Pierce, F. J	Apr. 18, 1893	497,955	Frei, G. A	May 23, 1893
495,676	Hudson, T	Apr. 18, 1893	499,908	Cathrein, J	June 20, 1893
496,474	Dillon, J	May 2, 1893	500,488	Gratiaa, S. D	June 27, 1893

176. ELECTRIC LIGHTING.—98.—LIGHTS—SOCKETS AND KEYS.

478,149	Werline, H. E	July 5, 1892	488,951	Ries, E. E	Dec. 27, 1892
479,359	Goldkind, I	July 19, 1892	489,158	Foster, G. C. H	Jan. 3, 1893
480,900	Weston, E	Aug. 16, 1892	489,682	Metzger, A	Jan. 10, 1893
480,988	Ball, H. P	Aug. 16, 1892	489,739	Henry, L. and Dalysson, L. N	Jan. 10, 1893
481,019	Ford, B	Aug. 16, 1892	490,605	Vetter, A. F	Jan. 24, 1893
483,974	Allam, E. P	Oct. 4, 1892	491,268	Elliott, E. R	Feb. 7, 1893
484,207	Klein, C. J	Oct. 11, 1892	491,561	Hutchinson, J	Feb. 14, 1893
484,580	Bergmann, S	Oct. 18, 1892	493,109	McLaughlin, J. F	Mar. 7, 1893
485,587	Potter, J. S. and Cartwright, D. J	Nov. 1, 1892	493,609	Ball, H. B. and Metzger, A	Mar. 14, 1893
486,334	Hall, G. W. and De Marr, J. J.	Nov. 15, 1892	497,849	Wirt, H. C	May 23, 1893
487,213	Elliott, C. B	Nov. 29, 1892	11,341	Goldkind, I (Reis.)	May 23, 1893
487,846	Lean, G. R. and Burleigh, C. B.	Dec. 13, 1892	498,374	Ball, H. P	May 30, 1893
488,205	Hutchinson, J	Dec. 20, 1892	498,758	Ball, H. P. and Metzger, A	June 6, 1893
488,222	Rockwell, F. C	Dec. 20, 1892	499,275	Wirt, H. C	June 13, 1893
488,835	Ries, E. E	Dec. 27, 1892			

176. ELECTRIC LIGHTING.—19. SYSTEMS.

478,186	Cooke, E. T. and Makay, W. H.	July 5, 1892	489,526	Doubleday, H. M	Jan. 10, 1893
479,035	Thum, M	July 19, 1892	489,598	Badt, F. B	Jan. 10, 1893
479,673	Smith, F. L. M. and Bryan, W. J	July 26, 1892	490,327	Van Hoevenbergh, H	Jan. 24, 1893
480,009	Furgang, R	Aug. 2, 1892	491,426	Holcombe, J. H. L	Feb. 7, 1893
480,369	Linville, S. R	Aug. 9, 1892	493,842	Rushmore, S. W	Mar. 21, 1893
480,375	Selden, C	Aug. 9, 1892	494,239	Barnett, H. T	Mar. 28, 1893
481,281	Page, A. D	Aug. 23, 1892	495,932	Edmunds, H., jr	Apr. 18, 1893
481,665	Furgang, R	Aug. 30, 1892	496,366	Moore, D. McF. and Jacobs, C. M	Apr. 25, 1893
481,666	Furgang, R	Aug. 30, 1892	496,611	Hutchins, A. E	May 2, 1893
481,785	Cravath, P	Aug. 30, 1892	496,918	Thomson, E	May 9, 1893
481,904	Huber, E	Aug. 30, 1892	496,901	Rohrer, A. L	May 9, 1893
482,433	Atkinson, L. B	Sept. 13, 1892	497,310	Cullen, W. A	May 16, 1893
482,780	Boughton, C. V	Sept. 20, 1892	497,491	Cuno, C	May 16, 1893
483,739	Green, C	Oct. 4, 1892	497,680	Nordmann, P	May 16, 1893
484,110	McElroy, J. F	Oct. 11, 1892	497,755	Meissner, W	May 16, 1893
484,479	Ward, B. B	Oct. 18, 1892	498,312	Scribner, C. E	May 30, 1893
485,287	McKay, W. H	Nov. 1, 1892	499,143	Peterson, C	June 6, 1893
485,425	O'Neill, H. G	Nov. 1, 1892	500,026	Morey, C. L	June 20, 1893
487,881	Newman, N	Dec. 13, 1892	500,417	Noyes, R. N	June 27, 1893
488,307	Bradley, C. S	Dec. 20, 1892			

176. ELECTRIC LIGHTING.—166. SYSTEMS—AUTOMATIC REGULATION.

492,633	Rollins, R. W	Feb. 28, 1893	496,455	Thomson, E. and Rice, E. W., jr	May 2, 1893
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176. ELECTRIC LIGHTING.—129. SYSTEMS—CAR.

478,182	Young, S., Moskowitz, M., Adler, L. D. and Lowenberg, J.	July 5, 1892	480,372	Myers, G. F	Aug. 9, 1892
478,183	Young, S. and Moskowitz, M	July 5, 1892	484,208	Leonard, H. W	Oct. 11, 1892
			485,647	Nichols, D. H. and Colton, C. L. and C. A.	Nov. 8, 1892

176. ELECTRIC LIGHTING.—167. SYSTEMS—HAND REGULATION.

437,356	Tomlinson, T				Dec. 6, 1892
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176. ELECTRIC LIGHTING.—131. SYSTEMS—TEST.

No.	NAME.	DATE.	No.	NAME.	DATE.
480,038	Rudd, C. H.-----	Aug. 2, 1892	497,552	Sachs, J.-----	May 16, 1893
496,801	Stevenson, E. W.-----	May 2, 1893			

176. ELECTRIC LIGHTING.—180. CEILING BLOCK.

481,624	Pass, J. and Seymour, A. P.-----	Aug. 30, 1892	493,754	Crockett, C. H. and Allen, C. C.-----	Mar. 21, 1893
484,077	Wirt, C.-----	Oct. 11, 1892	493,884	Barry, C. E.-----	Mar. 21, 1893
484,911	Green, J. J.-----	Oct. 25, 1892	498,539	Duggan, F. A.-----	May 30, 1893
491,596	Robb, J. T.-----	Feb. 14, 1893	498,698	Ruggles, C. H.-----	May 30, 1893

177. ELECTRIC SIGNALING.—1. ALARMS.

479,046	Bacorn, F. W.-----	July 19, 1892	490,684	Schilling, G. W. and Haslam, J. G.-----	Jan. 31, 1893
479,282	Keith, R. D.-----	July 19, 1892			
479,540	Wharton, J. C. and Braid, J. W.-----	July 19, 1892	490,725	Smith, F. G.-----	Jan. 31, 1893
480,673	Rothlisberger, E.-----	Aug. 9, 1892	491,580	Milligan, C. J.-----	Feb. 14, 1893
482,148	Badt, F. B.-----	Sept. 6, 1892	492,236	Rodgers, W. H.-----	Feb. 21, 1893
482,778	Barnard, G. L.-----	Sept. 20, 1892	492,627	Kintner, C. J.-----	Feb. 28, 1893
485,352	McIntosh, G.-----	Nov. 1, 1892	494,765	Tyler, H. L.-----	Apr. 4, 1893
486,054	Rodgers, W. H.-----	Nov. 8, 1892	496,067	Skelton, F. C.-----	Apr. 25, 1893
486,807	Fowler, W.-----	Nov. 22, 1892	496,869	Egan, C. E.-----	May 9, 1893
487,634	McDermott, G. L.-----	Dec. 6, 1892	498,372	Ward, B. B.-----	May 30, 1893

177. ELECTRIC SIGNALING.—2. ALARMS—BURGLAR.

480,090	Hull, W. S.-----	Aug. 2, 1892	489,902	Hull, W. S.-----	Jan. 10, 1893
480,100	Hull, W. S.-----	Aug. 2, 1892	490,161	Nadeau, J. A.-----	Jan. 17, 1893
480,340	Neal, F. H. and Donnelly, J. R.-----	Aug. 9, 1892	490,326	Trout, F. B.-----	Jan. 24, 1893
481,711	Bessey, M. W.-----	Aug. 30, 1892	490,353	James, W. G.-----	Jan. 24, 1893
482,464	Wilson, H. T.-----	Sept. 13, 1892	490,479	Kruschke, R. C.-----	Jan. 24, 1893
483,728	Stromberg, A.-----	Oct. 4, 1892	490,870	Carr, W. H.-----	Jan. 31, 1893
483,844	Hopkins, N. M.-----	Oct. 4, 1892	492,330	Kamsler, J.-----	Feb. 21, 1893
484,232	Nolley, D. D.-----	Oct. 11, 1892	492,478	Stuarts, C. F. A.-----	Feb. 28, 1893
484,233	Nolley, D. D.-----	Oct. 11, 1892	492,646	Walker, W. J.-----	Feb. 28, 1893
486,149	Wilder, E. R.-----	Nov. 15, 1892	494,923	Hull, W. S.-----	Apr. 4, 1893
486,212	Leland, H. W.-----	Nov. 15, 1892	497,062	Sturtevant, F.-----	May 9, 1893
486,338	Hull, H. A.-----	Nov. 15, 1892	497,430	Leland, H. W.-----	May 16, 1893
486,908	Stromberg, A.-----	Nov. 29, 1892	499,261	Stromberg, A.-----	June 13, 1893
487,128	Reynolds, H. W.-----	Nov. 29, 1892	499,428	Hull, W. S.-----	June 13, 1893
487,448	Osbourne, D. K.-----	Dec. 6, 1892	499,864	Walker, W. J. and Bedford, A. L.-----	June 20, 1893

177. ELECTRIC SIGNALING.—3. ANNUNCIATORS.

480,073	Crabtree, L. T.-----	Aug. 2, 1892	496,207	Porter, M. D.-----	Apr. 25, 1893
483,310	Raymond, N. H.-----	Sept. 27, 1892	499,411	Armstrong, C. G.-----	June 13, 1893

177. ELECTRIC SIGNALING.—139. ANNUNCIATORS—DROP.

480,729	Lane, T. W.-----	Aug. 16, 1892	488,536	Bates, J. H.-----	Dec. 27, 1892
481,120	Pickernell, F. A.-----	Aug. 16, 1892	492,519	Hard, J. R.-----	Feb. 28, 1893
482,263	Moore, E. D.-----	Sept. 6, 1892	498,808	McBerty, F. R.-----	June 6, 1893
486,820	Carter, F. S.-----	Nov. 22, 1892			

177. ELECTRIC SIGNALING.—157. ANNUNCIATORS—DROP SYSTEMS.

486,243	Harter, F. S. and Stumpf, G. P.-----	Nov. 15, 1892	489,237	Schweigler, W., jr.-----	Jan. 3, 1893
488,567	Lyman, A. B.-----	Dec. 27, 1892			

177. ELECTRIC SIGNALING.—140. ANNUNCIATORS—STEP-BY-STEP.

478,275	Deeron, W. E.-----	July 5, 1892	494,762	Rogers, J. B.-----	Apr. 4, 1893
479,950	Loomis, F. F.-----	Aug. 2, 1892	495,127	Wilder, E. R.-----	Apr. 11, 1893
489,736	Geary, J. E.-----	Jan. 10, 1893	496,192	Elfering, J. H.-----	Apr. 25, 1893
492,011	Haight, H. J.-----	Feb. 21, 1893			

177. ELECTRIC SIGNALING.—158. ANNUNCIATORS—TIME.

No.	NAME.	DATE.	No.	NAME.	DATE.
481,919	Benner, F.-----	Aug. 30, 1892	492,694	McMorrow, J., jr.-----	Feb. 28, 1893
492,545	Trafford, W.-----	Feb. 28, 1893	493,067	Carter, F. S.-----	Mar. 7, 1893

177. ELECTRIC SIGNALING.—7. BELLS.

480,319	Conover, G. W.-----	Aug. 9, 1892	492,309	Reenstierna, G. L.-----	Feb. 21, 1893
483,309	Raymond, N. H.-----	Sept. 27, 1892	494,098	Folger, C. H.-----	Mar. 21, 1893
483,625	Wilson, H. T.-----	Oct. 4, 1892	494,278	Manger, F. W. and Huebel, O. H.	Mar. 28, 1893
484,762	Thorn, J. E.-----	Oct. 18, 1892	495,564	Porter, H. B.-----	Apr. 18, 1893
485,379	Hard, J. R.-----	Nov. 1, 1892	496,690	Kolbe, H. F.-----	May 2, 1893
486,354	Ross, J. J.-----	Nov. 15, 1892	499,305	Moore, J. L.-----	June 13, 1893
487,437	Wagner, P.-----	Dec. 6, 1892	500,027	Murdock, W. J.-----	June 20, 1893
488,388	Davis, A. G.-----	Dec. 20, 1892			

177. ELECTRIC SIGNALING.—26. INDICATORS.

481,223	Cords, A. B. and W. H.-----	Aug. 23, 1892	489,005	Hiss, N.-----	Jan. 3, 1893
482,171	Guaso, A. F. and Chusin, A.-----	Sept. 6, 1892	495,047	Knowles, C. V.-----	Apr. 11, 1893
482,421	Cory, C.-----	Sept. 13, 1892	500,359	Utzinger, A.-----	June 27, 1893

177. ELECTRIC SIGNALING.—159. INDICATORS—STATION.

488,415	Ayres, R. B.-----	Dec. 20, 1892	498,607	Ayres, R. R.-----	May 30, 1893
498,280	Manuel, M.-----	May 30, 1893			

177. ELECTRIC SIGNALING.—38. RAILWAY.

479,666	Schreuder, J. G. L.-----	July 26, 1892	489,629	Desant, W. F. Z.-----	Jan. 10, 1893
484,205	Hunter, J. H. and Lucock, J. S.-----	Oct. 11, 1892	491,837	Crabtree, L. T.-----	Feb. 14, 1893
488,285	Patenall, T. H.-----	Dec. 20, 1892	492,645	Wait, H. St. C.-----	Feb. 28, 1893
488,654	Harris, F.-----	Dec. 27, 1892	494,489	Ramsey, J., jr. and Harden, E. W.	Mar. 28, 1893
489,113	Zaremba, E.-----	Jan. 3, 1893	496,473	Daves, W. and Peddle, W. H.-----	May 2, 1893
489,625	Desant, W. F. Z.-----	Jan. 10, 1893			

177. ELECTRIC SIGNALING.—147. RAILWAY—BLOCK.

478,928	Wilson, A. J.-----	Aug. 2, 1892	492,497	Kenyon, W. H.-----	Feb. 28, 1893
481,430	Slater, W. W. and Barnes, H. C.-----	Aug. 23, 1892	493,125	Seiler, P.-----	Mar. 7, 1893
486,569	Ross, J. J.-----	Nov. 22, 1892	495,913	Savager, J. S., jr.-----	Apr. 18, 1893

177. ELECTRIC SIGNALING.—146. RAILWAY—BLOCK SYSTEMS.

480,411	Patenall, T. H.-----	Aug. 9, 1892	496,041	Corrington, M.-----	Apr. 25, 1893
484,068	Urbain, E.-----	Oct. 11, 1892	497,836	Sykes, W. R. and O'Donnell, J. P.	May 23, 1893
488,225	Schafer, E.-----	Dec. 20, 1892	498,290	McCaskey, A. S.-----	May 30, 1893
490,761	Wilson, A. J. and Salmon, W. W.-----	Jan. 31, 1893	498,864	Steele, J. W.-----	June 6, 1893
494,077	Peters, R. D.-----	Mar. 21, 1893	500,041	Swartz, G. W.-----	June 20, 1893
494,525	Fontaine, E.-----	Mar. 28, 1893			

177. ELECTRIC SIGNALING.—149. RAILWAY—CAR, SECTIONAL RAIL.

479,333	Putnam, T. A. B.-----	July 19, 1892	492,402	Kinsman, F. E.-----	Feb. 28, 1893
481,062	Sayer, R. C.-----	Aug. 16, 1892	492,403	Kinsman, F. E.-----	Feb. 28, 1893
484,614	Seaton, B. C.-----	Oct. 18, 1892	492,837	Robinson, E. W.-----	Mar. 7, 1893
485,473	McCart, J. and Judkins, A. G.-----	Nov. 1, 1892	493,678	Bradford, J. and Williams, J. P.	Mar. 21, 1893
487,752	Kinsman, F. E.-----	Dec. 13, 1892	493,935	Miller, H. V. and A. C.-----	Mar. 21, 1893
488,615	Schlusser, F. P.-----	Dec. 27, 1892	494,007	La Burt, J.-----	Mar. 21, 1893
490,626	Green, I. L.-----	Jan. 24, 1893	494,111	Miller, S. W., A. C. and H. V.	Mar. 21, 1893
490,663	La Burt, J.-----	Jan. 31, 1893	495,193	Berne, A. W.-----	Apr. 11, 1893
491,874	Clarke, F. H.-----	Feb. 14, 1893			

177. ELECTRIC SIGNALING.—150. RAILWAY—SECTIONAL RAIL.

No.	NAME.	DATE.	No.	NAME.	DATE.
479,138	Loomis, F. F. -----	July 19, 1892	492,457	Blackwell, F. O. -----	Feb. 28, 1893
479,225	Schreuder, J. G. -----	July 19, 1892	496,786	Lattig, J. W. -----	May 2, 1893
480,147	Stewart, J. B. -----	Aug. 2, 1892	496,787	Lattig, J. W. -----	May 2, 1893
482,422	Danley, R. J. M. -----	Sept. 13, 1892	497,408	Jordan, W. H. -----	May 16, 1893
482,423	Danley, R. J. M. -----	Sept. 13, 1892	498,865	Stewart, J. B. and Wattson, W. G.	June 6, 1893
486,047	Lattig, J. W. -----	Nov. 8, 1892	499,125	Lattig, J. W. -----	June 6, 1893
488,138	Young, J. V. -----	Dec. 13, 1892	499,126	Lattig, J. W. -----	June 6, 1893
491,387	Thaler, L. -----	Feb. 7, 1893	499,805	Stewart, J. B. -----	June 20, 1893
491,609	Stewart, J. B. -----	Feb. 14, 1893			

177. RAILWAY SIGNALING.—151. RAILWAY—TRACK INSTRUMENTS.

480,507	Patenall, T. H. -----	Aug. 9, 1892	487,904	Krulus, Z. -----	Dec. 13, 1892
483,231	Loy, I. W. and O'Toole, R. ----	Sept. 27, 1892	495,674	Alteneek, F. Von-Hefner -----	Apr. 18, 1893

177. ELECTRIC SIGNALING.—39. RECORDERS.

493,253	Deerow, W. E. -----				Mar. 14, 1893
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178. TELEGRAPHY.—46. AUTOMATIC.

478,152	Bridger, H. C. -----	July 5, 1892	491,347	Gray, E. -----	Feb. 7, 1893
479,184	Edison, T. A. and Kenny, P. ---	July 19, 1892	491,595	Roberts, R. S. -----	Feb. 14, 1893
487,154	Parker, J. A. and Summers, L. L	Nov. 29, 1892	494,562	Gray, E. -----	Apr. 4, 1893
487,936	Prentiss, H. S. -----	Dec. 13, 1892	497,281	Martin, M. -----	May 9, 1893
489,435	Hotchkiss, Z. P. -----	Jan. 3, 1893	498,911	Denison, S. P. -----	June 6, 1893
491,346	Gray, E. -----	Feb. 7, 1893	500,226	Cuttriss, C. -----	June 27, 1893

178. TELEGRAPHY.—10. CIRCUIT CLOSERS.

478,788	Denio, W. L. -----	July 12, 1892	494,337	King, J. -----	Mar. 28, 1893
479,834	Espinosa, Y. J. O. -----	Aug. 2, 1892	497,411	McGregory, F. S. -----	May 16, 1893
480,683	Wollensack, J. F. -----	Aug. 9, 1892	498,550	Holtuin, A. -----	May 30, 1893
489,266	Rabbidge, P. -----	Jan. 3, 1893	500,110	Berrigan, W. H., jr. -----	June 27, 1893
492,850	Strowger, A. B. and W. S. -----	Mar. 7, 1893			

178. TELEGRAPHY.—128. CIRCUIT CLOSERS—THERMAL.

478,701	Maxim, H. F. and Price, J. M. ---	July 12, 1892	488,645	Ashley, E. L. and Camp, W. H. ---	Dec. 27, 1892
479,849	Sheperd, T. W. -----	Aug. 2, 1892	489,075	Erkins, C. R. H. -----	Jan. 3, 1893
481,989	Wilson, H. T. -----	Sept. 6, 1892	489,312	La Franee, E. -----	Jan. 3, 1893
482,420	Compton, M. D. -----	Sept. 13, 1892	493,601	Shepard, T. W. -----	Mar. 14, 1893
483,339	Beers, I. F. and F. C. -----	Sept. 27, 1892	493,602	Shepard, T. W. -----	Mar. 14, 1893
484,386	D'Almeida, J. J. and Da Silva, J. Y.	Oct. 18, 1892	496,659	Kerr, R. C. and Hardmann, P. ---	May 2, 1893
			497,800	Krogh, E. C. C. -----	May 23, 1893
487,002	Cutter, G. -----	Nov. 29, 1892	497,923	Martin, M. -----	May 23, 1893
487,519	Elliott, F. O. -----	Dec. 6, 1892	498,153	Bradley, J. L. -----	May 23, 1893
488,611	Krogh, F. C. C. -----	Dec. 27, 1892			

178. TELEGRAPHY.—45. CIRCUITS AND SYSTEMS.

482,136	Richards, W. S. -----	Sept. 6, 1892	492,471	Piekernell, F. A. -----	Feb. 28, 1893
485,279	Jacques, W. W. -----	Nov. 1, 1892	493,673	Baines, E. -----	Mar. 21, 1893
486,332	Gipperle, A. -----	Nov. 15, 1892	495,030	Fahrney, W. H. -----	Apr. 11, 1893
490,064	Brown, F. H. -----	Jan. 17, 1893	495,744	Levi, J. -----	Apr. 18, 1893
492,219	Lyman, A. B. -----	Feb. 21, 1893			

178. TELEGRAPHY.—12. CONDENSERS.

498,907	Stanley, W. and Tobey, W. B. -----				June 6, 1893
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178. TELEGRAPHY.—49. DYNAMO.

No.	NAME.	DATE.	No.	NAME.	DATE.
491,163	Field, S. D				Feb. 7, 1893

178. TELEGRAPHY.—103. FIRE—ALARMS AND EXTINGUISHERS.

492,866	Hurd, C. S				Mar. 7, 1893
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178. TELEGRAPHY.—50. FIRE.

479,715	Martin, M	July 26, 1892	488,579	Scribner, C. E	Dec. 27, 1892
481,590	Sachs, J	Aug. 30, 1892	491,758	Von Orth, L	Feb. 14, 1893
481,613	Chase, H. A	Aug. 30, 1892	494,279	Martin, M	Mar. 28, 1893
483,768	Rolfe, C. A	Oct. 4, 1892	494,596	Ring, J. H	Apr. 4, 1893
484,206	James, W. H	Oct. 11, 1892	494,786	Mehren, J. F	Apr. 4, 1893
485,351	McClellan, C. W	Nov. 1, 1892	494,787	Mehren, J. F	Apr. 4, 1893
486,206	Wilson, J. C	Nov. 15, 1892	497,942	Bell, J. M	May 23, 1893
486,282	Fuller, F. H. and Perkins, C. B	Nov. 15, 1892	498,448	Sachs, J	May 30, 1893
486,702	Decrow, W. E	Nov. 22, 1892	498,987	Ongley, C. E	June 6, 1893
487,095	Scribner, C. E	Nov. 29, 1892	498,988	Ongley, C. E	June 6, 1893

178. TELEGRAPHY.—160. FIRE—AUTOMATIC.

478,789	Denio, W. L	July 12, 1892	496,724	Dillman, W. C. and Leib, G. A.	May 2, 1893
484,140	Cortland, H	Oct. 11, 1892			

178. TELEGRAPHY.—162. FIRE—ENGINE-HOUSE APPARATUS.

485,367	Bosch, A	Nov. 1, 1892	490,211	Nielsen, H. P	Jan. 17, 1893
486,612	Hewitt, W. R	Nov. 22, 1892			

178. TELEGRAPHY.—163. FIRE—NON-INTERFERING.

481,847	Coffee, A. J	Aug. 30, 1892	499,003	Banks, W. F	June 6, 1893
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178. TELEGRAPHY.—161. FIRE—VARIABLE SIGNAL, DIAL.

482,877	Pearce, F	Sept. 20, 1892	500,285	Kirnan, W. H	June 27, 1893
487,676	Martin, M	Dec. 6, 1892			

178. TELEGRAPHY.—29. KEYS.

479,782	Butler, B. F	Aug. 2, 1892	480,689	Bradford, C. W	Aug. 9, 1892
479,859	Tucker, A. F	Aug. 2, 1892	481,114	Lott, W. F	Aug. 16, 1892
480,475	McClaren, A. E	Aug. 9, 1892			

178. TELEGRAPHY.—30. LIGHTNING ARRESTERS.

478,383	Van Nuis, C. L	July 5, 1892	495,853	Thomson, E	Apr. 18, 1893
486,498	Osburn, H. G	Nov. 22, 1892	497,120	Chinnock, C. E	May 9, 1893
488,002	Garton, W. R	Dec. 13, 1892	497,397	Wurts, A. and Scott, C. F	May 16, 1893
492,544	Scott, C. F	Feb. 28, 1893	497,507	Wurts, A	May 16, 1893
492,548	Wurts, A	Feb. 28, 1893	497,508	Wurts, A	May 16, 1893
492,549	Wurts, A	Feb. 28, 1893	497,509	Wurts, A	May 16, 1893
493,314	Thomson, E	Mar. 14, 1893	497,838	Thomson, E	May 23, 1893
493,926	Henneberg, H. O	Mar. 21, 1893	500,178	Wood, M. M	June 27, 1893
494,186	Wurts, A	Mar. 28, 1893	500,454	Wurdack, W	June 27, 1893
495,714	Thomson, E	Apr. 18, 1893	500,455	Wurts, A	June 27, 1893

178. TELEGRAPHY.—51. MULTIPLEX.

481,247	Smith, J. G				Aug. 23, 1892
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178. TELEGRAPHY.—54. PRINTING.

No.	NAME.	DATE.	No.	NAME.	DATE.
482,015	Lillard, G. T. and Erhard, W. --	Sept. 6, 1892	487,983	Buckingham, C. L. -----	Dec. 13, 1892
487,227	Neal, A. D. and Eaton, H. E. --	Nov. 29, 1892	487,984	Buckingham, C. L. -----	Dec. 13, 1892
487,228	Neal, A. D. and Eaton, H. E. --	Nov. 29, 1892	487,985	Buckingham, C. L. -----	Dec. 13, 1892
487,229	Neal, A. D. and Eaton, H. E. --	Nov. 29, 1892	487,986	Buckingham, C. L. -----	Dec. 13, 1892
487,981	Buckingham, C. L. -----	Dec. 13, 1892	498,289	McCaskey, A. S. -----	May 30, 1893
487,982	Buckingham, C. L. -----	Dec. 13, 1892	498,674	Murray, D. -----	May 30, 1893

178. TELEGRAPHY.—141. PRINTING—MULTIPLE WHEEL.

491,133	Porter, M. D. -----	Feb. 7, 1893	496,549	Wirsching, A. H. -----	May 2, 1893
494,185	Wright, J. E. -----	Mar. 28, 1893			

178. TELEGRAPHY.—142. PRINTING—WHEEL.

486,888	Neal, A. D. and Eaton, H. F. --	Nov. 29, 1892	498,529	Baillard, E. V. -----	May 30, 1893
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178. TELEGRAPHY.—55. QUADRUPLIX.

480,567	Edison, T. A. -----	Aug. 9, 1892	499,811	Wicks, P. J. -----	June 20, 1893
493,620	Freir, S. P. -----	Mar. 14, 1893			

178. TELEGRAPHY.—56. RAILWAY CAR.

478,135	Selden, C. -----	July 5, 1892	482,306	Hall, C. K. -----	Sept. 6, 1892
481,042	Mcrritt, G. -----	Aug. 16, 1892	483,375	Reilley, M. S. -----	Oct. 11, 1892
482,126	Henry, J. M. and Wilson, R. B.	Sept. 6, 1892	486,634	Edison, T. A. -----	Nov. 22, 1892

178. TELEGRAPHY.—41. RELAYS AND SOUNDERS.

482,129	Ludwig, D. J. -----	Sept. 6, 1892	485,334	Safford, A. G. -----	Nov. 1, 1892
482,137	Richards, W. S. -----	Sept. 6, 1892	486,051	Maret, J. and De Graff, W. L. --	Nov. 8, 1892
482,440	Maver, W., jr. -----	Sept. 13, 1892	492,689	Lattig, J. W. -----	Feb. 28, 1893

178. TELEGRAPHY.—42. REPEATERS.

479,178	Weiny, R. H. -----	July 19, 1892	488,940	Jones, F. W. -----	Dec. 27, 1892
488,550	Field, S. D. -----	Dec. 27, 1892			

178. TELEGRAPHY.—69. TRANSMITTERS.

480,644	Willoughby, C. -----	Aug. 9, 1892	494,345	Pearce, F. -----	Mar. 28, 1893
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179. TELEPHONY.—82. ANTI-INDUCTION DEVICES.

488,034	Scribner, C. E. -----				Dec. 13, 1892
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179. TELEPHONY.—81. CONDUCTORS—ANTI-INDUCTIVE.

482,149	Barrett, J. A. -----	Sept. 6, 1892	482,152	Barrett, J. A. -----	Sept. 6, 1892
482,150	Barrett, J. A. -----	Sept. 6, 1892	482,328	Barrett, J. A. -----	Sept. 6, 1892
482,151	Barrett, J. A. -----	Sept. 6, 1892	491,109	Holman, S. W. -----	Feb. 7, 1893

179. TELEPHONY.—57. TELEPHONES—CALLS.

491,531	Currier, J. B. -----	Feb. 14, 1893	496,076	Wetzer, H. -----	Apr. 25, 1893
491,532	Currier, J. B. and Rice, D. H. --	Feb. 14, 1893			

179. TELEPHONY.—144. CALLS—STEP-BY-STEP.

No.	NAME.	DATE.	No.	NAME.	DATE.
479,308	Seiler, P -----	July 19, 1892	491,893	Kinsman, J. H -----	Feb. 14, 1893
483,272	Vineing, H. E -----	Sept. 27, 1892	492,110	Sack, J -----	Feb. 21, 1893

179. TELEPHONY.—58. TELEPHONES—DETAILS.

479,062	Eldredge, D -----	July 19, 1892	489,603	Davidson, J. L -----	Jan. 10, 1893
481,204	Shea, C. A -----	Aug. 23, 1892	493,245	Brown, G. McC -----	Mar. 14, 1893
483,713	Gross, F -----	Oct. 4, 1892	495,180	Carty, J. J. and Pickernell, F. A	Apr. 11, 1893
488,385	Chase, E. B -----	Dec. 20, 1892	498,243	Davis, A. G -----	May 30, 1893

179. TELEPHONY.—59. TELEPHONES—ELECTRIC.

478,692	D'Unger, P. H -----	July 12, 1892	486,244	Clamond, C -----	Nov. 15, 1892
480,656	Christy, J. A -----	Aug. 9, 1892	488,367	Rabidge, P -----	Dec. 20, 1892
481,048	Noriega, E -----	Aug. 16, 1892	489,990	Scribner, C. E -----	Jan. 17, 1893
481,049	Noriega, E -----	Aug. 16, 1892	491,275	Tyler, H. L -----	Feb. 7, 1893
481,050	Noriega, E -----	Aug. 16, 1892	492,789	Edison, T. A -----	Mar. 7, 1893
481,051	Noriega, E -----	Aug. 16, 1892	492,883	Bloomer, C. T -----	Mar. 7, 1893
481,529	Gibboney, J. W -----	Aug. 23, 1892	498,309	Scattergood, C. F -----	May 30, 1893
484,778	Collier, A. T -----	Oct. 25, 1892	499,108	Harrison, E. M -----	June 6, 1893
485,311	White, A. C -----	Nov. 1, 1892	500,481	Forbes, C. S -----	June 27, 1893
485,876	McDonough, J. W -----	Nov. 8, 1892			

179. TELEPHONY.—60. TELEPHONES—MAGNETIC.

479,226	Shaver, G. F -----	July 19, 1892	488,993	Francis, J. C -----	Jan. 3, 1893
481,138	Brown, F. H -----	Aug. 16, 1892	496,224	Holman, S. W -----	Apr. 25, 1893
481,284	Rettig, A. -----	Aug. 23, 1892	496,602	Field, S. D -----	May 2, 1893
484,150	Forbes, C. S -----	Oct. 11, 1892	497,649	Freeman, J. P -----	May 16, 1893
485,859	Bruening, W -----	Nov. 8, 1892	498,919	Pickering, B. -----	June 6, 1893
487,219	Hayes, H. V. and Richards, W. L	Nov. 29, 1892			

179. TELEPHONY.—77. TELEPHONES—RELAYS AND REPEATERS.

478,743	Edison, T. A -----	July 12, 1892	492,467	Haynes, C. M -----	Feb. 28, 1893
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179. TELEPHONY.—100. TELEPHONES—SUPPORTS.

481,293	Bailey, J. R. and Lincoln, L. C	Aug. 23, 1892	487,369	Lewis, E. C -----	Dec. 6, 1892
483,027	Benjamin, G. V -----	Oct. 25, 1892	493,869	Wilkerson, B. M -----	June 6, 1893

179. TELEPHONY.—85. TELEPHONES—SWITCH-BOARDS.

478,324	Gillett, C. F -----	July 5, 1892	496,381	Gray, A. C -----	Apr. 25, 1893
485,643	Moore, J. J. and Henry, D. A	Nov. 8, 1892	499,693	Wilson, C. H -----	June 13, 1893
483,522	Lyon, I. W -----	Dec. 20, 1892			

179. TELEGRAPHY.—71. TELEPHONES—SWITCHES.

492,019	Humans, W -----	Feb. 21, 1893	493,907	Bloomer, C. T -----	Mar. 21, 1893
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179. TELEPHONY.—64. TELEPHONES—SYSTEMS.

473,493	Wreden, R -----	July 5, 1892	484,867	Scribner, C. E -----	Oct. 25, 1892
479,227	Shaver, G. F -----	July 19, 1892	486,506	Scribner, C. E -----	Nov. 22, 1892
481,433	Dyer, R. N -----	Aug. 23, 1892	487,102	Stone, J. S -----	Nov. 29, 1892
481,678	Scribner, C. E -----	Aug. 30, 1892	488,033	Scribner, C. E. and Warner, E. P	Dec. 13, 1892
481,878	Thomson, E -----	Aug. 30, 1892	488,502	Jennings, C. C -----	Dec. 20, 1892
483,506	Bell, O. A -----	Sept. 27, 1892	488,666	Sloper, T. B -----	Dec. 27, 1892
484,613	Scribner, C. E -----	Oct. 18, 1892	489,098	Scribner, C. E -----	Jan. 3, 1893
484,626	Carty, J. J -----	Oct. 18, 1892	489,099	Scribner, C. E -----	Jan. 3, 1893

179. TELEPHONY.—64. TELEPHONES—SYSTEMS—Continued.

No.	NAME.	DATE.	No.	NAME.	DATE.
489,100	Scribner, C. E.-----	Jan. 3, 1893	495,179	Carty, J. J.-----	Apr. 11, 1893
489,570	Scribner, C. E.-----	Jan. 10, 1893	496,513	Field, S. D.-----	May 2, 1893
492,482	Hall, E. F. and Pickernell, F. A	Feb. 28, 1893	496,904	Scribner, C. E.-----	May 9, 1893
492,483	Hall, E. F. and Pickernell, F. A	Feb. 28, 1893	496,905	Scribner, C. E.-----	May 9, 1893
493,704	Goodridge, W. M.-----	Mar. 21, 1893	496,906	Scribner, C. E.-----	May 9, 1893
495,087	Hall, E. J.-----	Apr. 11, 1893	496,907	Scribner, C. E.-----	May 9, 1893

179. TELEPHONY.—101. TELEPHONES—SYSTEMS, AUTOMATIC.

486,909	Strowger, A. B.-----	Nov. 29, 1892	498,291	McCaskey, A. S.-----	May 30, 1893
498,236	Clark, E. A.-----	May 30, 1893	499,748	McClaren, A. E.-----	June 20, 1893

179. TELEPHONY.—133. TELEPHONES—DIVIDED CENTRAL.

482,174	Hibbard, A. L.-----	Sept. 6, 1892	496,859	Clark, E. A.-----	May 9, 1893
491,553	Hall, E. J.-----	Feb. 14, 1893			

179. TELEPHONY.—135. TELEPHONES—SYSTEMS, MULTIPLE SWITCH-BOARD.

487,795	Taintor, G.-----	Dec. 13, 1892	487,852	McCullough, A. H.-----	Dec. 13, 1892
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179. TELEPHONY.—137. TELEPHONES—SYSTEMS, MULTIPLE SWITCH-BOARD, TEST.

479,107	Oesterreich, W.-----	July 19, 1892	488,036	Scribner, C. E.-----	Dec. 13, 1892
481,679	Scribner, C. E.-----	Aug. 30, 1892	488,037	Scribner, C. E.-----	Dec. 13, 1892
483,175	Scribner, C. E.-----	Sept. 27, 1892	488,038	Scribner, C. E.-----	Dec. 13, 1892
484,612	Scribner, C. E.-----	Oct. 18, 1892	488,053	Bell, O. A.-----	Dec. 13, 1892
486,507	Scribner, C. A.-----	Nov. 22, 1892	489,571	Scribner, C. E. and Patterson, W. R.-----	Jan. 10, 1893
487,096	Scribner, C. E.-----	Nov. 29, 1892	491,250	Scribner, C. E.-----	Feb. 7, 1893
487,098	Scribner, C. E.-----	Nov. 29, 1892	491,252	Seely, J. A.-----	Feb. 7, 1893
487,853	McQuarrie, A. H.-----	Dec. 13, 1892	11,306	Scribner, C. E.----- (Reis.)	Feb. 7, 1893
487,854	McQuarrie, J. L.-----	Dec. 13, 1892	492,484	McQuarrie, J. L.-----	Feb. 28, 1893
488,035	Scribner, C. E.-----	Dec. 13, 1892			

179. TELEPHONY.—136. TELEPHONES—SYSTEMS, MULTIPLE SWITCH-BOARD, DIVIDED CENTRAL.

487,097	Scribner, C. E.-----	Nov. 29, 1892	494,385	Pickernell, F. A. and Dunbar, F. W.-----	Mar. 28, 1893
491,688	Scribner, C. E.-----	Feb. 14, 1893			

191. ELECTRIC RAILWAYS.—1. CONDUCTOR SUPPORTS AND INSULATORS.

478,518	McCarthy, L.-----	July 5, 1892	487,332	Lindahl, H.-----	Dec. 6, 1892
479,216	Ingmanson, J. and Lorang, R.-----	July 19, 1892	489,097	Scranton, G. H. and Spillman, L	Jan. 3, 1893
483,388	Prewitt, W. Q.-----	Sept. 27, 1892	493,212	Head, F. E.-----	Mar. 7, 1893
484,280	Anderson, A.-----	Oct. 11, 1892	493,713	Hathaway, M. H. and Kel- leher, J.-----	Mar. 21, 1893
485,105	Lee, C. T.-----	Oct. 25, 1892	497,293	Hamlin, H. A.-----	May 9, 1893
485,106	Lee, C. T.-----	Oct. 25, 1892	498,776	Englund, A. H.-----	June 6, 1893
486,333	Guilley, A. H. R.-----	Nov. 15, 1892	499,662	Elliott, C. B.-----	June 13, 1893
486,477	Kinsman, F. E.-----	Nov. 22, 1892	499,943	Spillman, L.-----	June 20, 1893
486,585	Lain, D. E.-----	Nov. 22, 1892			

191. ELECTRIC RAILWAYS.—2. ELECTRIC LOCOMOTIVES.

478,138	Sperry, E. A.-----	July 5, 1892	483,822	Willson, T. L.-----	Oct. 4, 1892
478,139	Sperry, E. A.-----	July 5, 1892	486,068	Allington, W. E.-----	Nov. 15, 1892
478,242	Short, S. H.-----	July 5, 1892	487,114	Conradson, C. M.-----	Nov. 29, 1892
478,477	Short, S. H.-----	July 5, 1892	487,329	Jackson, C. A.-----	Dec. 6, 1892
478,591	Gray, J.-----	July 12, 1892	488,930	Van Depoele, C. J.-----	Dec. 27, 1892
479,469	Short, S. H.-----	July 26, 1892	489,883	Tripp, T.-----	Jan. 10, 1893
480,918	Eikemeyer, R.-----	Aug. 16, 1892	490,307	Philipsborn, A. and Schiemann, M.-----	Jan. 24, 1893
482,594	Soley, W. H. and Perkins, W. W	Sept. 13, 1892	491,666	Short, S. H.-----	Feb. 14, 1893
482,863	Conradson, C. M.-----	Sept. 20, 1892	491,667	Short, S. H.-----	Feb. 14, 1893
483,204	Bassett, N. C.-----	Sept. 27, 1892			

191. ELECTRIC RAILWAYS.—2. ELECTRIC LOCOMOTIVES—Continued.

No.	NAME.	DATE.	No.	NAME.	DATE.
491,857	Rae, F. B -----	Feb. 14, 1893	496,330	Van Depoele, C. J -----	Apr. 25, 1893
493,089	Henry, J. C -----	Mar. 7, 1893	496,550	Boynton, E. M -----	May 2, 1893
493,425	Edison, T. A -----	Mar. 14, 1893	497,356	Strong, G. S -----	May 16, 1893
493,942	Philipsborn, A -----	Mar. 21, 1893	498,577	Schmid, A -----	May 30, 1893
493,943	Philipsborn, A -----	Mar. 21, 1893	500,022	Moakler, J. W -----	June 20, 1893
493,969	Brown, C -----	Mar. 21, 1893	500,066	Henry, J. C -----	June 20, 1893
494,344	Neal, J. H -----	Mar. 28, 1893	500,067	Henry, J. C -----	June 20, 1893
494,479	Henry, J. C -----	Mar. 28, 1893	500,276	Stevens, F. M -----	June 27, 1893
494,705	Hunter, R. M -----	Apr. 4, 1893			

191. ELECTRIC RAILWAYS.—3. SYSTEMS.

484,123	Stone, C. A. and Webster, E. S. -----	Oct. 11, 1892	493,918	Evans, P -----	Mar. 21, 1893
485,668	Stone, C. A. and Webster, E. S. -----	Nov. 8, 1892			

191. ELECTRIC RAILWAYS.—7. SYSTEMS—CIRCUITS, MULTIPLE ARC.

484,919	Pendleton, J. H -----	Oct. 25, 1892	497,024	Hunter, R. M -----	May 9, 1893
496,533	Perry, N. W -----	May 2, 1893			

191. ELECTRIC RAILWAYS.—8. SYSTEMS—CIRCUITS, SERIES.

491,691	Thomas, G. L -----	Feb. 14, 1893	500,256	Smith, M. H -----	June 27, 1893
492,659	Cattori, M -----	Feb. 28, 1893			

191. ELECTRIC RAILWAYS.—6. SYSTEMS—CLOSED CONDUIT.

478,346	Mansfield, F -----	July 5, 1892	490,248	Harris, T -----	Jan. 17, 1893
478,956	Ford, W. H -----	July 12, 1892	490,306	Parker, R. and Sutton, B. F -----	Jan. 24, 1893
479,809	Johnson, E. H -----	Aug. 2, 1892	490,597	Hayden, R -----	Jan. 24, 1893
480,409	Lineoff, A. L -----	Aug. 9, 1892	490,975	Mitchell, E. W -----	Jan. 31, 1893
480,850	Hunter, R. M -----	Aug. 16, 1892	491,132	Perkins, F. C -----	Feb. 7, 1893
482,348	Dupus, G. A -----	Sept. 13, 1892	492,398	Heiser, A -----	Feb. 28, 1893
482,993	Bunce, L. P -----	Sept. 20, 1892	493,623	Harris, T -----	Mar. 14, 1893
483,761	Creighton, W. G -----	Oct. 4, 1892	493,716	Hazelton, E -----	Mar. 21, 1893
484,924	Sutton, B. F -----	Oct. 25, 1892	493,948	Von Siemens, G. W -----	Mar. 21, 1893
487,654	Vanderpool, A. A -----	Dec. 6, 1892	494,477	Henry, J. C -----	Mar. 28, 1893
488,351	Dion, L. O -----	Dec. 20, 1892	495,996	Patton, W. P -----	Apr. 25, 1893
488,738	Mansfield, F -----	Dec. 27, 1892	497,436	Westinghouse, G., jr -----	May 16, 1893
489,422	Tatro, C. P -----	Jan. 3, 1893	497,585	Martin, A. J -----	May 16, 1893
489,563	Kimball, D. E -----	Jan. 10, 1893	498,189	Reynolds, J. L -----	May 23, 1893
489,573	Von Siemens, G. W -----	Jan. 10, 1893	498,852	Kintner, C. J -----	June 6, 1893
489,764	Sheldon, J. B., Murnane, D. J. -----	Jan. 10, 1893	500,065	Henry, J. C -----	June 20, 1893
	Von Beck, G. L. -----		500,104	Reed, C. J -----	June 20, 1893
489,835	Stark, C. A -----	Jan. 10, 1893	500,506	McGregor, J. A. K -----	June 27, 1893

191. ELECTRIC RAILWAYS.—5. SYSTEMS—CONDUIT.

479,327	Hieatzman, A. H -----	July 19, 1892	492,106	Rae, F. B -----	Feb. 21, 1893
480,004	Baker, C. H -----	Aug. 2, 1892	492,265	Bryan, F. W -----	Feb. 21, 1893
481,401	Jenkins, W. F -----	Aug. 23, 1892	492,737	Bates, J. H -----	Feb. 28, 1893
481,402	Jenkins, W. F -----	Aug. 23, 1892	493,618	Davis, J. and Huntington, R. M -----	Mar. 14, 1893
481,403	Jenkins, W. F -----	Aug. 23, 1892	493,695	Petrow, H. P -----	Mar. 21, 1893
481,517	Platt, S. L -----	Aug. 30, 1892	495,456	De Voe, W. R -----	Apr. 11, 1893
481,905	Hunter, R. M -----	Aug. 30, 1892	496,896	Prewitt, M. Q -----	May 9, 1893
481,959	Lawrence, R -----	Sept. 6, 1892	497,377	Just, P. C -----	May 16, 1893
482,506	Fisher, J -----	Sept. 13, 1892	497,394	Westinghouse, G., jr -----	May 16, 1893
482,719	Blackwell, F. O -----	Sept. 20, 1892	498,135	Moffett, G. F -----	May 23, 1893
482,964	Hunter, R. M -----	Sept. 20, 1892	498,169	Hieatzman, A. H -----	May 23, 1893
483,856	Murphy, W. G -----	Oct. 4, 1892	498,906	Smith, M. H -----	June 6, 1893
486,317	Wright, A. W -----	Nov. 15, 1892	499,374	De Voe, W. R -----	June 13, 1893
486,985	Olbricht, B -----	Nov. 29, 1892	500,306	Warner, E. P -----	June 27, 1893
487,735	Hayden, J. W -----	Dec. 13, 1892			

191. ELECTRIC RAILWAYS.—9. SYSTEMS—CONVERTER.

No.	NAME.	DATE.	No.	NAME.	DATE.
479,493	Dewey, M. W.-----	July 26, 1892	493,914	Reymond, A. Du Bois -----	Mar. 21, 1893
480,543	Badt, F. B.-----	Aug. 9, 1892	498,603	Zipernowsky, C.-----	May 30, 1893
483,366	Ricker, A. L.-----	Sept. 27, 1892	500,068	Henry, J. C.-----	June 20, 1893
489,597	Badt, F. B.-----	Jan. 10, 1893			

. 191. ELECTRIC RAILWAYS.—11. SYSTEMS—OVERHEAD.

478,175	Shoemaker, M.-----	July 5, 1892	497,495	Hassan, M. W.-----	May 16, 1893
483,494	Hunter, R. M.-----	Sept. 27, 1892	499,167	Hunter, R. M.-----	June 6, 1893
490,297	Miner, H. A.-----	Jan. 24, 1893	499,112	Henry, J. C.-----	June 6, 1893
492,881	Winton, H. D.-----	Mar. 7, 1893	499,270	Witner, H. K.-----	June 13, 1893
495,615	Rae, F. B.-----	Apr. 18, 1893	499,321	Gear, S. W.-----	June 13, 1893
497,025	Hunter, R. M.-----	May 9, 1893	499,461	Hunter, R. M.-----	June 13, 1893
497,337	Patterson, W. R.-----	May 16, 1893			

191. ELECTRIC RAILWAYS.—12. SYSTEMS—OVERHEAD TROLLEYS.

478,410	Davis, J. W.-----	July 5, 1892	491,361	Kochs, B. and A.-----	Feb. 7, 1893
479,608	Poole, F. F.-----	July 26, 1892	491,988	Dickinson, A.-----	Feb. 21, 1893
480,240	Purple, G. E. and C. W.-----	Aug. 2, 1892	493,789	Saitz, J. F.-----	Mar. 21, 1893
480,766	Fortin, C.-----	Aug. 16, 1892	494,721	Martyn, E.-----	Apr. 4, 1893
481,503	Merkins, J. S.-----	Aug. 23, 1892	494,871	Langheinz, E. L.-----	Apr. 4, 1893
481,517	Walsh, J.-----	Aug. 23, 1892	495,035	Heath, F.-----	Apr. 11, 1893
481,956	Kimball, G. A.-----	Sept. 6, 1892	495,383	Van Depoele, C. J.-----	Apr. 11, 1893
482,031	Adams, C. A. and Thorp, T. J.-----	Sept. 6, 1892	495,443	Van Depoele, C. J.-----	Apr. 11, 1893
482,325	Tyner, J. M. C. and Irving, S. S.-----	Sept. 6, 1892	495,692	Cleminshaw, C. G. and Bradt, W. H.-----	Apr. 18, 1893
483,061	Hough, J. C.-----	Sept. 20, 1892	495,695	Duncan, W.-----	Apr. 18, 1893
483,689	Hoppers, J. J.-----	Oct. 4, 1892	496,280	Pritchett, W. W.-----	Apr. 25, 1893
484,344	Smith, E. B.-----	Oct. 11, 1892	496,631	Adams, T. E.-----	May 2, 1893
484,986	Wood, M. M.-----	Oct. 25, 1892	498,046	Allen, E. H.-----	May 23, 1893
487,808	Werling, J. and Agnew, J. F.-----	Dec. 13, 1892	498,355	Lord, C. A.-----	May 30, 1893
487,813	Wörner, A.-----	Dec. 13, 1892	498,403	O'Shaughnessy, P. F.-----	May 30, 1893
488,022	Mason, D.-----	Dec. 13, 1892	498,435	Hunter, R. M.-----	May 30, 1893
488,023	Mason, D.-----	Dec. 13, 1892	498,722	Nutall, R. D.-----	May 30, 1893
488,179	Bentley, E. M.-----	Dec. 20, 1892	498,723	Nutall, R. D.-----	May 30, 1893
488,706	Browne, W. L.-----	Dec. 27, 1892	498,932	Griffiths, J. R.-----	June 6, 1893
488,811	Hirt, L. J.-----	Dec. 27, 1892	498,933	Griffiths, J. R.-----	June 6, 1893
488,929	Van Depoele, C. J.-----	Dec. 27, 1892	499,095	Chase, J.-----	June 6, 1893
489,207	Starkweather, M. S.-----	Jan. 3, 1893	499,115	Hooper, G. W.-----	June 6, 1893
489,234	Reutlinger, J.-----	Jan. 3, 1893	499,871	Cochran, H.-----	June 20, 1893
489,481	Jenkins, E. H.-----	Jan. 10, 1893	500,070	Henry, J. C.-----	June 20, 1893
490,628	Love, J. C.-----	Jan. 17, 1893	500,263	Duncan, W.-----	June 27, 1893
491,014	Goetz, J. J. and Smith, J. A.-----	Jan. 31, 1893			
491,210	Harris, S.-----	Feb. 7, 1893			

191. ELECTRIC RAILWAYS.—13. SYSTEMS—TELPER.

480,804	Bryson, A., jr.-----	Aug. 16, 1892	496,329	Van Depoele, C. J.-----	Apr. 25, 1893
489,330	Rutter, A. L.-----	Jan. 3, 1893			

21. CARRIAGES AND WAGONS.—39. RUNNING GEAR.

480,980	Turner, A. G.-----				Aug. 16, 1892
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21. CARRIAGES AND WAGONS.—67. VELOCIPEDES.

479,825	Mattison, J. D.-----				Aug. 2, 1892
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21. CLOTH FINISHING.—9. CUTTING LACE-LOOPED FABRICS.

478,515	Mann, J. J.-----				July 5, 1892
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28. CORDAGE.—7. FINISHING YARN AND THREAD.

No.	NAME.	DATE.	No.	NAME.	DATE.
479,358	Foster, S. L.-----				July 19, 1892

28. CORDAGE.—9. PACKAGING BRAID AND YARN.

482,917	Dix, H. S.-----				Sept. 20, 1892
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40. ADVERTISING.—49. INDICATORS—ROTARY.

481,364	Manton, H. L.-----				Aug. 23, 1892
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40. ADVERTISING.—14. SIGNS—ILLUMINATED.

478,204	McGinsey, C. R.-----				July 5, 1892
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45. FURNITURE.—70. TABLES.

478,565	Butler, L. C.-----				July 12, 1892
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49. GLASS.—7. MOLDS.

478,792	Gaynor, J.-----				July 12, 1892
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49. GLASS.—8. ORNAMENTATION.

479,743	Headly, C. B. and Carrow, J. S.-----				July 26, 1892
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57. HOISTING.—58. CRANES AND DERRICKS—NON-PIVOTED JIB, ROTATING.

496,433	Morgan, W. H.-----				May 2, 1893
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57. HOISTING.—61. CRANES AND DERRICKS—PIVOTED JIB, ROTARY, PORTABLE.

496,429	Morgan, W. H.-----				May 2, 1893
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57. HOISTING.—65. CRANES AND DERRICKS—TRAVELING, DOUBLE TRACK.

496,427	Morgan, W. H.-----	May 2, 1893	496,432	Morgan, W. H.-----	May 2, 1893
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57. HOISTING.—67. ELEVATED CARRIER.

481,833	Sharpsteen, S. H.-----	Aug. 30, 1892	500,375	Brodie, W. H.-----	June 27, 1893
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57. HOISTING.—80. MAIL-BAG CATCHERS.

496,551	Bradford, E. W.-----				May 2, 1893
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58. HOROLOGY.—23. CLOCKS—ELECTRIC.

479,520	Mackellar, M. and Weaver, G. D	July 26, 1892	485,645	McAulis, J. D. and Fleming, H. E	Nov. 8, 1892
480,576	Gardner, W. F.-----	Aug. 9, 1892	494,832	Hubleler, H.-----	Apr. 4, 1893
480,577	Gardner, W. F.-----	Aug. 9, 1892	496,134	Prentiss, H. S.-----	Apr. 25, 1893
480,890	Weston, E.-----	Aug. 16, 1892	496,135	Prentiss, H. S.-----	Apr. 25, 1893
481,916	Brokhoroff, W.-----	Aug. 30, 1892	499,737	Howland, R. S.-----	June 20, 1893

58. HOROLOGY.—15. TIME ALARMS.

No.	NAME.	DATE.	No.	NAME.	DATE.
478,155	Darche, G. C -----	July 5, 1892	495,770	Bartlett, A -----	Apr. 18, 1893
478,865	Jacobi, J -----	July 12, 1892	496,258	Hain, H. C -----	Apr. 25, 1893
489,423	Tirrell, J. P -----	Jan. 3, 1893	498,468	Fowler, W. M -----	May 30, 1893
494,966	Page, H. S -----	Apr. 4, 1893	498,710	Gibson, C. S -----	May 30, 1893
495,287	Adams, T. B -----	Apr. 11, 1893			

58. HOROLOGY.—16. TIME CHECKS.

482,251	Heyser, E. A -----	Sept. 6, 1892	488,687	Bundy, W. L -----	Dec. 27, 1892
485,591	Tilden, J. A -----	Nov. 1, 1892	491,978	Bolte, F. H -----	Feb. 21, 1893

58. HOROLOGY.—31. TIME LAMP LIGHTERS.

478,180	Waters, B. E -----	July 5, 1892	489,428	Biaggiy, A -----	Jan. 3, 1893
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58. HOROLOGY.—33. TIME SIGNALS.

482,699	Scott, W -----				Sept. 13, 1892
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58. HOROLOGY.—18. WATCH BALANCES.

484,796	Hunter, G. E -----	Oct. 25, 1892	484,797	Hyatt, J. W -----	Oct. 25, 1892
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61. HYDRAULIC ENGINEERING.—18. PILE DRIVERS.

479,965	Van Depoele, C. J -----				Aug. 2, 1892
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64. JOURNAL BOXES.—5. PULLEYS AND SHAFTING—BELT TIGHTENERS.

489,505	Silvey, W. L -----	Jan. 10, 1893	496,567	Hoffmann, C. H -----	May 2, 1893
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66. KNITTING AND NETTING.—7. STOPPING.

481,726	Clute, V. S -----	Aug. 30, 1892	499,921	Hammond, F -----	June 20, 1893
496,060	Manderfield, G. J -----	Apr. 25, 1893			

66. KNITTING AND NETTING.—12. FEEDING.

495,472	Buxtorf, E -----				Apr. 18, 1893
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67. LAMPS AND GAS FITTINGS.—58. DROP LIGHTS—SPRING DRUM.

488,298	Welsh, F. P -----	Dec. 20, 1892	489,815	Hume, C. S -----	Jan. 10, 1893
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67. LAMPS AND GAS FITTINGS.—57. DROP LIGHTS—FRICTION AND CLUTCH.

489,172	Wilcox, C. W -----				Jan. 3, 1893
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67. LAMPS AND GAS FITTINGS.—66. CANOPY SHADES AND REFLECTORS.

481,378	Stanley, L. T -----				Aug. 23, 1892
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67. LAMPS AND GAS FITTINGS.—62. GAS LIGHTING ATTACHMENTS.

487,744	Jacob, A. P -----				Dec. 13, 1892
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67. LAMPS AND GAS FITTINGS.—77. GLOBES.

No.	NAME.	DATE.	No.	NAME.	DATE.
479,207 481,285	Edmond, W. J. and Keon, T. J. Salisk, C. J. and Lipp, E.-----	July 19, 1892 Aug. 23, 1892	483,482	Elridge, H.-----	Sept. 27, 1892

67. LAMPS AND GAS FITTINGS.—94. GUARDS.

479,791	Demmick, G. W.-----	Aug. 2, 1892
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67. LAMPS AND GAS FITTINGS.—78. HARPS AND HANGERS.

479,509 483,556	Weaphy, J. W., jr.----- Holt, H. L.-----	July 26, 1892 Oct. 4, 1892	495,951	Whitney, L. C.-----	Apr. 18, 1893
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67. LAMPS AND GAS FITTINGS.—70. HEAD LIGHTS.

478,683	Cavner, A. R.-----	July 12, 1892	499,473	Sautter, G.-----	June 13, 1893
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67. LAMPS AND GAS FITTINGS.—67. SHADE SUPPORTS.

21,701	Gaston, J. F.----- (Design)	July 12, 1892	499,470	Remhof, C.-----	June 13, 1893
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67. LAMPS AND GAS FITTINGS.—35. SIGNAL LAMPS.

484,449	Page, D. S. and Bertsch, J. L.-----	Oct. 18, 1892
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67. LAMPS AND GAS FITTINGS.—73. STREET LIGHT HANGERS.

480,470 482,112	Maier, J.----- Wight, A.-----	Aug. 9, 1892 Sept. 6, 1892	498,570	Renehan, J. J.-----	May 30, 1893
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67. LAMPS AND GAS FITTINGS.—66. CANOPY—SHADES AND REFLECTORS.

483,044	Clift, J.-----	Sept. 20, 1892
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67. LAMPS AND GAS FITTINGS.—29. STREET LAMPS.

480,720	Goold, F. D'A.-----	Aug. 16, 1892
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67. LAMPS AND GAS FITTINGS.—54. SIDE REFLECTORS.

480,201	Meadows, C. A.-----	Aug. 2, 1892	486,729	Miller, C. E.-----	Nov. 22, 1892
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67. LAMPS AND GAS FITTINGS.—69. SAFETY LAMPS AND LANTERNS.

489,150	Keil, A.-----	Jan. 3, 1893
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70. LOCKS AND LATCHES.—50. ELECTRIC LOCKS.

478,245	Smith, H. V.-----	July 5, 1892
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70. LOCKS AND LATCHES.—15. LOCK STRIKES—ELECTRIC.

480,546	Bates, L.-----	Aug. 9, 1892
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70. LOCKS AND LATCHES.—25. TILL LOCKS.

No.	NAME.	DATE.	No.	NAME.	DATE.
479,374	Mahannah, F -----				July 19, 1892

73. MEASURING INSTRUMENTS.

22,101	Weston, E -----			(Design.)	Jan. 3, 1893
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73. MEASURING INSTRUMENTS.—2. ANEMOMETERS.

478,086	Butcher, J -----				July 5, 1892
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73. MEASURING INSTRUMENTS.—101. BALANCES—ELECTRICAL ATTACHMENTS.

499,223	Garringer, C. R -----				June 13, 1893
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73. MEASURING INSTRUMENTS.—59. FARE REGISTERS.

496,688	Houghton, S. C -----				May 2, 1893
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73. MEASURING INSTRUMENTS.—35. REGISTERS—PASSENGER.

480,526	Squires, H. S -----	Aug. 9, 1892	492,353	Gott, C. P -----	Feb. 21, 1893
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73. MEASURING INSTRUMENTS.—69. SHIP'S LOGS.

495,587	Holt, C. F -----				Apr. 18, 1893
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73. MEASURING INSTRUMENTS.—43. SPEED MEASURES.

487,275	Johnston, F. L. and Fletcher, W. C. -----	Dec. 6, 1892	487,702	Abbott, W. H -----	Dec. 13, 1892
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73. MEASURING INSTRUMENTS.—85. THERMOMETERS.

489,259	Maxim, H. T. and Price, J. M -----				Jan. 3, 1893
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73. MEASURING INSTRUMENTS.—15. DYNAMOMETERS.

480,981	Warner, E. P -----	Aug. 16, 1892	495,175	Wood, E. J -----	Apr. 11, 1893
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73. MEASURING INSTRUMENTS.—117. TELEMETERS.

490,012	Dibble, F. J -----	Jan. 17, 1893	498,871	Ayton, C. W -----	June 6, 1893
490,013	Dibble, F. J -----	Jan. 17, 1893	498,872	Ayton, C. W -----	June 6, 1893
490,014	Dibble, F. J -----	Jan. 17, 1893	499,610	Todd, J. T -----	June 13, 1893

73. MEASURING INSTRUMENTS.—35. TELETHERMOMETERS.

489,212	Bartlett, J -----				Jan. 3, 1893
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73. MEASURING INSTRUMENTS.—93. STEAM ENGINES—RECORDING INDICATORS.

495,148	Collins, R. G -----				Apr. 11, 1893
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74. MACHINE ELEMENTS.—7. GEARING.

No.	NAME.	DATE.	No.	NAME.	DATE.
499,633	Henry, J. C -----				June 13, 1893

74. MACHINE ELEMENTS.—21. GEARING—BELT.

487,069	Harrington, W. E-----	Nov. 29, 1892	487,070	Harrington, W. E-----	Nov. 29, 1892
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75. METALLURGY.—149. FURNACES—ELECTRIC.

482,586	Parker, T -----	Sept. 13, 1892	494,586	Mitchell, W -----	Apr. 4, 1893
494,585	Mitchell, W -----	Apr. 4, 1893			

83. MILLS.—65. AMALGAMATORS—ELECTRIC.

489,216	Calhoun, H-----	Jan. 3, 1893	481,683	Aylsworth J. W. and Payne, A. C	Aug. 30, 1892
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83. MILLS.—67. AMALGAMATORS—MERCURY.

489,101	Seymour, C. E -----				Jan. 3, 1893
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83. MILLS.—71. MAGNETIC SEPARATORS.

495,608	Crosby, G. C-----	Apr. 18, 1893	497,117	Buchanan, C. G-----	May 9, 1893
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83. MILLS.—3. GRINDING—MILL STONE DRESS.

483,179	Sturtevant, T. L-----				Sept. 27, 1892
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83. MILLS.—11. ORE AND COAL.

486,715	Imlay, W. L-----				Nov. 22, 1892
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84. MUSIC.—81. ELECTRIC ACTIONS.

488,482	Pain, R. W-----	Dec. 20, 1892	498,573	Riegger, C -----	May 30, 1893
496,402	Eisenmam, R -----	May 2, 1893			

88. OPTICS.—22. DISTANCE INSTRUMENTS.

483,999	Fiske, B. A-----				Oct. 11, 1892
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89. ORDNANCE.—15. SUBMARINE GUNS.

478,215	Berdan, H-----				July 5, 1892
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95. PHOTOGRAPHY.—29. RETOUCHING.

492,245	Standiford, J. F-----				Feb. 21, 1893
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96. COATING WITH METAL.—2. GALVANIZING.

494,667	Clamer, F. J-----	Apr. 4, 1893	494,668	Clamer, F. J-----	Apr. 4, 1893
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98. PNEUMATICS.—37. RAIL—DISPATCH TUBES.

No.	NAME.	DATE.	No.	NAME.	DATE.
480,805	Bryson, A., jr -----				Aug. 16, 1892

101. PRINTING.—3. AUTOGRAPHIC.

485,767	Lewis, A. D -----				Nov. 8, 1892
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101. PRINTING.—24. BRANDING STAMPS.

483,050	Fitzmaurice, J. S -----				Sept. 20, 1892
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101. PRINTING.—56. HAND STAMPS.

483,151	Hoggson, S. H -----				Sept. 27, 1892
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101. PRINTING.—44. MATRIX MAKING.

479,539	Travis, C. L -----	July 26, 1892	479,773	Goodson, G. A -----	July 26, 1892
479,772	Goodson, G. A. and Capehart, A. S. -----	July 26, 1892	495,835	Redfield, C. L -----	Apr. 18, 1893

101. PRINTING.—45. OSCILLATING.

483,564	Korsmeyer, E. H -----				Oct. 4, 1892
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101. PRINTING.—131. SHEET STENCILS, MAKING.

498,973	Garnett, D. M. and J. H -----				June 6, 1893
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101. PRINTING.—133. STENCIL MAKING PENS.

498,519	Lewis, A. D. and Witherell, S -----				May 30, 1893
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102. PROJECTILES.—15. SHELLS.

478,216	Berdan, H -----				July 5, 1892
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104. RAILWAYS.—104. AUTOMATIC.

488,441	Lothrop, G. H -----				Dec. 20, 1892
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105. RAILWAYS.—6. CAR BRAKES.

489,972	Miller, A. C -----	Jan. 17, 1893	494,751	Bassett, N. C -----	Apr. 4, 1893
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105. RAILWAYS.—26. CAR STARTERS.

488,462	Weaver, W -----				Dec. 20, 1892
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104. RAILWAYS.—24. TRAMWAY SWITCHES.

488,132	Reinhardt, J. H -----	Dec. 13, 1892	489,944	Goetz, A. C -----	Jan. 17, 1893
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116. SIGNALS.—11. FIRE.

No.	NAME.	DATE.	No.	NAME.	DATE.
496,519	Krumscheid, P				May 2, 1893

123. AIR AND GAS ENGINES.—3. EXPLOSIVE.

480,272	Nichols, E. J	Aug. 9, 1892	495,281	Tremper, F. E	Apr. 11, 1893
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125. STONE WORKING.—6. DRESSING STONE.

479,500	Githens, G. M	July 26, 1892	497,197	Nellis, A. J	May 9, 1893
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125. STONE WORKING.—14. MINING MACHINES.

478,141	Sperry, E. A	July 5, 1892	481,921	Atkinson, L. B., Ravenchaw, H. W. and Mori, F.	Sept. 6, 1892
481,775	Athunson, L. B. and C. W	Aug. 30, 1892			

126. STOVES AND FURNACES.—14. DAMPERS—AUTOMATIC.

489,052	Watts, J. E				Jan. 3, 1893
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126. STOVES AND FURNACES.—114. DAMPERS—AUTOMATIC EXPANSION.

489,991	Seamans, I. M				Jan. 17, 1893
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126. STOVES AND FURNACES.—116. DAMPERS—ELECTRICAL AUTOMATIC.

488,414	Zunner, J. H. G				Dec. 20, 1892
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126. STOVES AND FURNACES.—117. ELECTRIC HEATERS.

490,082	McLaughlin, J. F	Jan. 17, 1893	497,795	Jenkins, S. B	May 23, 1893
497,771	Cook, S. M	May 23, 1893	498,078	O'Neill, H. G	May 23, 1893
497,790	Jenkins, S. B	May 23, 1893	500,272	Roehl, C. E., Mitchell, S. Z. and Wetmore, E. P.	June 27, 1893
497,791	Jenkins, S. B	May 23, 1893			
497,792	Jenkins, S. B	May 23, 1893	500,288	McElroy, J. F	June 27, 1893
497,793	Jenkins, S. B	May 23, 1893	500,520	Wetmore, E. P	June 27, 1893
497,794	Jenkins, S. B	May 23, 1893			

126. STOVES AND FURNACES.—82. SOLAR HEATERS.

496,959	Severy, M. L				May 9, 1893
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128. SURGERY.—10. EAR.

494,958	Jordan, C. M				Apr. 4, 1893
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126. SURGERY.—16. MOVEMENT CURE.

499,786	Goodman, E. J				June 20, 1893
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138. HYDRAULIC MOTORS.—8. ELEVATORS.

498,605	Atwood, L				May 30, 1893
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140. WIRE WORKING.—15. JOINING.

No.	NAME.	DATE.	No.	NAME.	DATE.
495,626	Curtis, J. D.-----				Apr. 18, 1893

148. ANNEALING AND TEMPERING.—10. APPLICATION OF ELECTRICITY.

482,879	Purdy, F.-----	Sept. 27, 1892	484,637	Hunter, J. H.-----	Oct. 18, 1892
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148. ANNEALING AND TEMPERING.—38. SOLUTIONS.

496,208	Procnunier, H. E.-----				Apr. 25, 1893
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151. NUT AND BOLT LOCKS.—3. SIDE.

497,963	Johnson, A. L.-----				May 23, 1893
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166. ARTESIAN AND OIL WELLS.—2. CLEANING.

495,936	Gardner, F.-----				Apr. 18, 1893
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169. FIRE EXTINGUISHERS.—3. STATIONARY.

480,747	Shaffer, H. C.-----				Aug. 16, 1892
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181. ACOUSTICS.—4. GRAPHOPHONES.

496,191	Edison, T. A.-----	Apr. 25, 1893	499,879	Edison, T. A.-----	June 20, 1893
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181. ACOUSTICS.—3. MECHANICAL TELEPHONES.

481,133	Bowen, W. J.-----	Aug. 16, 1892	496,137	Ricke, G. H. E.-----	Apr. 25, 1893
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185. MECHANICAL MOTORS.—6. SPRING.

487,745	Johnston, W. C.-----				Dec. 13, 1892
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186. STORE SERVICE.—7. SWITCHES.

489,179	Brodie, W. H.-----				Jan. 3, 1893
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187. ELEVATORS.—2. CONTROLLERS.

483,203	Bassett, N. C.-----	Sept. 27, 1892	488,424	Butler, L. W.-----	Dec. 20, 1892
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189. IRON STRUCTURES.—3. JAILS.

494,924	Hull, W. S.-----				Apr. 4, 1893
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192. CLUTCHES.—10. MULTIPLE DISK.

496,710	Thomson, E.-----				May 2, 1893
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193. CONVEYERS.—1. CONVEYERS.

498,558	Lee, T.-----				May 30, 1893
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194. COIN-CONTROLLED APPARATUS.—17. PHONOGRAPHS.

No.	NAME.	DATE.	No.	NAME.	DATE.
489,519	Anthony, W. O -----	Jan. 10, 1893	494,807	Flora, E. E -----	Apr. 4, 1893
494,778	Flora, E. E -----	Apr. 4, 1893			

194. COIN-CONTROLLED APPARATUS.—25. TELEPHONES.

483,162	Muller, F -----	Sept. 27, 1892	497,907	Cooke, P -----	May 23, 1893
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194. COIN-CONTROLLED APPARATUS.—10. EXHIBITORS—SURFACE.

485,567	Ringen, J -----	Nov. 1, 1892	496,324	Pursell, H. D. and Price, E. F -	Apr. 25, 1893
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200. TOWERS.—3. TELEGRAPH POLES.

478,052	Bragdon, W. B -----	July 19, 1892	494,710	Carver, J. W. and C. E -----	Apr. 4, 1893
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204. ELECTROLYSIS.—1. AQUEOUS BATH.

488,708	Craney, T -----	Dec. 27, 1892	496,176	Wegner, G. and Gührs, P -----	Apr. 25, 1893
495,212	Wiswell, J. F -----	Apr. 11, 1893	499,726	Fletcher, C. R -----	June 20, 1893

204. ELECTROLYSIS.—2. AQUEOUS BATH—ALLOYS.

487,176	Coles, C. G. O -----				Nov. 29, 1892
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204. ELECTROLYSIS.—4. AQUEOUS BATH—ANODES.

482,724	Craney, T -----				Sept. 20, 1892
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204. ELECTROLYSIS.—5. AQUEOUS BATH—APPARATUS.

479,557	Clark, E. A -----	July 26, 1892	496,597	Chatlin, S. C -----	May 2, 1893
485,618	Farret, F -----	Nov. 8, 1892	497,129	Reams, A. R -----	May 9, 1893
489,551	Waite, C. N -----	Jan. 10, 1893			

204. ELECTROLYSIS.—6. AQUEOUS BATH—CATHODES.

485,343	Fletcher, C. R -----				Nov. 1, 1892
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204. ELECTROLYSIS.—9. AQUEOUS BATH—CHEMICALS.

480,491	Cntten, E. B -----	Aug. 9, 1892	496,864	Caney, T -----	May 9, 1893
480,492	Cutten, E. B -----	Aug. 9, 1892	496,865	Caney, T -----	May 9, 1893
480,493	Cntten, E. B -----	Aug. 9, 1892	498,768	Craney, T -----	June 6, 1893
484,990	Blackman, H -----	Oct. 25, 1892	498,769	Craney, T -----	June 6, 1893
489,677	Greenwood, J -----	Jan. 10, 1893	498,770	Craney, T -----	June 6, 1893
496,863	Caney, T -----	May 9, 1893	498,771	Craney, T -----	June 6, 1893

204. ELECTROLYSIS.—11. AQUEOUS BATH—DEPOLARIZING AND BURNISHING.

484,535	Howard, F. H -----				Oct. 18, 1892
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204. ELECTROLYSIS.—15. CHEMISTRY—ORES.

495,637	Pfeiger, J -----				Apr. 18, 1893
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CLASSIFIED INDEX—ELECTRICITY.

204. ELECTROLYSIS.—19. FUSED BATH.

No.	NAME.	DATE.	No.	NAME.	DATE.
495,600	Rennerfelt, G. O -----				Apr. 18, 1893

204. ELECTROLYSIS.—23. OZONE.

481,676	Sharp, C. C -----	Aug. 30, 1892	487,390	Fröhlich, O -----	Dec. 6, 1892
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204. ELECTROLYSIS.—25. PURIFYING LIQUIDS—WATER.

481,979	Stanley, L. T -----				Sept. 6, 1892
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APPENDIX No. XII.

PART II.

CONSISTING OF A

NUMERICAL AND CHRONOLOGICAL INDEX OF ALL PATENTS

RELATING TO

ELECTRICITY

Issued from July 1, 1892, to June 30, 1893, inclusive, giving names of Inventors,
numbers and dates of Patents, and the sub-class to which each belongs.

NUMERICAL INDEX

OF

PATENTS RELATING TO ELECTRICITY

FROM JULY 1, 1892, TO JUNE 30, 1893.

No.	NAME.	CLASS.	DATE.
478,086	Butcher, J	Adometers	July 5, 1892
478,097	Evershed, S	Galvanometers	July 5, 1892
478,098	Evershed, S	do	July 5, 1892
478,104	Hathaway, M. H	Magneto-electric	July 5, 1892
478,135	Selden, C	Telegraphy, railway car	July 5, 1892
478,138	Sperry, E. A	Electric locomotives	July 5, 1892
478,139	Sperry, E. A	do	July 5, 1892
478,140	Sperry, E. A	Connectors	July 5, 1892
478,141	Sperry, E. A	Mining machines	July 5, 1892
478,142	Sperry, E. A	Magneto-electric	July 5, 1892
478,145	Thomson, E	Lights, arc, positive feed, gear-clutch	July 5, 1892
478,149	Werline, H. E	Lights, sockets and keys	July 5, 1892
478,152	Bridger, H. C	Telegraphy, automatic	July 5, 1892
478,155	Darche, G. C	Time alarms	July 5, 1892
478,175	Shoemaker, M	Railways, systems, overhead	July 5, 1892
478,180	Waters, B. E	Time lamp lighters	July 5, 1892
478,182	Young, S., Moskowitz, M., Adler, L. D. and Lowenberg, J.	Lighting, systems, car	July 5, 1892
478,183	Young, S. and Moskowitz, M	do	July 5, 1892
478,186	Cooke, E. T. and Makay, W. H	Lighting, systems	July 5, 1892
478,201	Mitchell, W	Heating, soldering	July 5, 1892
478,204	McGinsey, C. R	Signs, illuminated, advertising	July 5, 1892
478,215	Berdan, H	Submarine guns	July 5, 1892
478,216	Berdan, H	Projectiles, shells	July 5, 1892
478,230	Gerry, J. H. and Long, C. E	Batteries, secondary	July 5, 1892
478,237	Pattee, H. H	Meters	July 5, 1892
478,242	Short, S. H	Electric locomotives	July 5, 1892
478,245	Smith, H. V	Electric locks	July 5, 1892
478,274	Decron, W. E	Lights, arc, special features	July 5, 1892
478,275	Decron, W. E	Annunciators, step-by-step	July 5, 1892
478,276	Eayrs, W. P	Rheostats	July 5, 1892
478,293	Simpson, F	Medical and surgical, body-wear	July 5, 1892
478,324	Gillett, C. F	Telephones, switch-board	July 5, 1892
478,344	Lenard, H. W	Transmission of power	July 5, 1892
478,346	Mansfield, F	Railways, systems, closed conduit	July 5, 1892
478,367	Sawyer, W. H	Conductors, anti-inductive	July 5, 1892
478,383	Van Nuis, C. L	Telegraphy, lighting arresters	July 5, 1892
478,410	Davis, J. W	Railways, systems, overhead, trolley	July 5, 1892
478,417	Drew, H. P	Lights, incandescent, special features	July 5, 1892
478,475	Secor, J. E	Motors	July 5, 1892
478,477	Short, S. H	Electric locomotives	July 5, 1892
478,485	Waldron, C. F	Batteries, secondary	July 5, 1892
478,493	Wreden, R	Telephones, systems	July 5, 1892
478,510	Hunter, R. M	Lights, arc, positive feed, gear-clutch	July 5, 1892
478,515	Mann, J. J	Lace looped fabrics	July 5, 1892
478,518	McCarthy, L	Railways, conductor supports and insulators	July 5, 1892
478,522	Quinn, D. J. and Hoffman, P. N	Igniting devices, manual	July 5, 1892
478,529	Thomas, C. N	Magneto-electric	July 5, 1892
478,551	Ball, C. M. and Norton, S	Separators	July 12, 1892
478,565	Bntler, L. C	Tables, wall	July 12, 1892
478,591	Gray, J	Electric locomotives	July 12, 1892
478,629	McTighe, T. J	Conductors	July 12, 1892
478,643	Scott, E. H	Heating, metal working	July 12, 1892
478,644	Scott, E. H	do	July 12, 1892
478,661	Tudor, H	Batteries, secondary	July 12, 1892
478,664	Van Kerckhove, A	do	July 12, 1892
478,683	Cayner, A. R	Head lights	July 12, 1892
478,689	Cleveland, W. B	Cut-outs, mechanical	July 12, 1892
478,692	D'Unger, P. H	Telephones, electric	July 12, 1892
478,701	Maxim, H. F. and Price, J. M	Telegraphy, circuit closers, thermal	July 12, 1892
478,718	Short, S. H	Cut-outs, mechanical	July 12, 1892
478,722	Thomson, E	Systems of distribution	July 12, 1892
478,743	Edison, T. A	Telephones, relays and repeaters	July 12, 1892

No.	NAME.	CLASS.	DATE.
478,788	Denio, W. L.	Telegraphy, circuit closers	July 12, 1892
478,789	Denio, W. L.	Telegraphy, fire, automatic	July 12, 1892
478,792	Gaynor, J.	Glass molds	July 12, 1892
478,816	Piat, A.	Motors	July 12, 1892
478,821	Lee, A. B. and Tyler, W. L.	Elevators	July 12, 1892
478,865	Jacobi, J.	Time alarms	July 12, 1892
478,956	Ford, W. H.	Railways, systems, closed conduit	July 12, 1892
478,968	Oug, H. F.	Motors	July 12, 1892
21,701	Gaston, J. E.	(Design) Lamps and gas fittings, shades	July 12, 1892
479,007	Logan, M. S.	Lights, arc, gravity feed, gear-clutch	July 19, 1892
479,017	Pfluger, C. A.	Lights, arc, special features	July 19, 1892
479,020	Richter, M. A. and Nolen, J. G.	Lights, incandescent, special features	July 19, 1892
479,029	Sperry, E. A.	Lights, arc, gravity feed, clutch	July 19, 1892
479,030	Sperry, E. A.	Magneto-electric	July 19, 1892
479,035	Thum, M.	Lighting, systems	July 19, 1892
479,046	Bacorn, F. W.	Alarms	July 19, 1892
479,052	Bragdon, W. B.	Towers, telegraph poles	July 19, 1892
479,062	Eldredge, D.	Telephones, details	July 19, 1892
479,101	Waring, J.	Rheostats	July 19, 1892
479,107	Oesterreich, W.	Telephones, systems, multiple switch-board, test.	July 19, 1892
479,118	Eikemeyer, R.	Magneto-electric	July 19, 1892
479,121	Irish, W. E.	Lights, arc, gravity feed, clutch	July 19, 1892
479,134	Conover, C. E.	Insulators	July 19, 1892
479,138	Loomis, F. F.	Railway signals, sectional rail	July 19, 1892
479,139	Miller, J. J.	Lights, incandescent, special features	July 19, 1892
479,147	Andrus, D. P.	Medical and surgical, body-wear	July 19, 1892
479,167	Kennelly, A. E.	Meters	July 19, 1892
479,168	Kennelly, A. E. and Olt, J. F.	Galvanometers	July 19, 1892
479,169	Kennelly, A. E. and Olt, J. F.	Magneto-electric	July 19, 1892
479,170	Lemp, H.	Regulators, alternating	July 19, 1892
479,171	Olt, J. F. and Kennelly, A. E.	Meters	July 19, 1892
479,172	Olt, J. F. and Kennelly, A. E.	do	July 19, 1892
479,178	Weiny, R. H.	Telegraphy, repeaters	July 19, 1892
479,179	Wightman, M. J.	Magneto-electric	July 19, 1892
479,183	Dobbie, R. S.	Lights, arc and incandescent	July 19, 1892
479,184	Edison, T. A. and Kenny, P.	Telegraphy, automatic	July 19, 1892
479,187	Hicks, T. H.	Motors, alternating	July 19, 1892
479,207	Edmond, W. J. and Keon, T. J.	Lamps and gas fittings, globes	July 19, 1892
479,216	Ingmanson, J. and Lorang, R.	Railways, conductor supports and insulators	July 19, 1892
479,225	Schreuder, J. G.	Railway signals, sectional rail	July 19, 1892
479,226	Shaver, G. F.	Telephones, magnetic	July 19, 1892
479,227	Shaver, G. F.	Telephones, systems	July 19, 1892
479,282	Keith, R. D.	Alarms	July 19, 1892
479,308	Seiler, P.	Telephones, calls, step-by-step	July 19, 1892
479,321	Williams, R. E.	Medical and surgical, combs and brushes	July 19, 1892
479,322	Wollensack, J. F.	Conductors	July 19, 1892
479,325	Gill, W. E.	Connectors	July 19, 1892
479,327	Heatzman, A. H.	Railways, systems, conduit	July 19, 1892
479,333	Putnam, T. A. B.	Railway signals, cab, sectional rail	July 19, 1892
479,358	Foster, S. L.	Yarn and thread	July 19, 1892
479,359	Goldkind, I.	Lights, sockets and keys	July 19, 1892
479,360	Green, H.	Lights, incandescent	July 19, 1892
479,374	Mahannah, F.	Till locks	July 19, 1892
479,386	Bennett, M.	Conductors, lead covered	July 19, 1892
479,397	Bradley, S. R.	Conductors, underground	July 26, 1892
479,410	Eklund, A. M.	Medical and surgical, body-wear	July 26, 1892
479,469	Short, S. H.	Electric locomotives	July 26, 1892
479,493	Dewey, M. W.	Railways, systems, converters	July 26, 1892
479,500	Githens, G. M.	Blasting stone	July 26, 1892
479,509	Weaphy, J. W., jr.	Lamps and gas fittings, harps and hangers	July 26, 1892
479,510	Irish, W. E.	Lights, arc, positive feed, clutch	July 26, 1892
479,520	Mackellar, M. and Weaver, G. D.	Clocks, electric	July 26, 1892
479,525	Perrine, F. A. C.	Conductors	July 26, 1892
479,539	Travis, C. L.	Matrix making	July 26, 1892
479,540	Wharton, J. C. and Braid, J. W.	Alarms	July 26, 1892
479,541	Williams, C.	Batteries, galvanic	July 26, 1892
479,557	Clark, E. A.	Electrolysis, aqueous bath, apparatus	July 26, 1892
479,596	Iden, C. W.	Batteries, thermal	July 26, 1892
479,608	Poole, F. F.	Railways, systems, overhead, trolley	July 26, 1892
479,659	Pierce, J. A.	Lights, arc, special features	July 26, 1892
479,666	Schreuder, J. G. L.	Railway signals	July 26, 1892
479,673	Smith, F. L. M. and Bryan, W. J.	Lighting, systems	July 26, 1892
479,675	Stanley, W., jr., and Kelley, J. F.	Motors, alternating	July 26, 1892
479,676	Stanley, W., jr., and Kelley, J. F.	do	July 26, 1892
479,715	Martin, M.	Telegraphy, fire	July 26, 1892
479,727	Stanley, W., jr., and Kelley, J. F.	Motors, alternating	July 26, 1892

No.	NAME.	CLASS.	DATE.
479,743	Headley, C. B. and Carrow, J. S	Ornamentation, glass	July 26, 1892
479,746	Kelley, J. F. and Stanley, W., jr	Motors, alternating	July 26, 1892
479,753	Colgate, A. E	Batteries, secondary	July 26, 1892
479,761	Kilbourn, W. H	Valve controllers	July 26, 1892
479,772	Goodson, G. A. and Capehart, A. S	Matrix making	July 26, 1892
479,773	Goodson, G. A	do	July 26, 1892
479,782	Butler, B. F	Telegraphy, keys	Aug. 2, 1892
479,786	Clark, M. M	Batteries, galvanic	Aug. 2, 1892
479,791	Demmick, G. W	Lamps and gas fittings, guards	Aug. 2, 1892
479,793	Elkins, W. H	Magneto-electric	Aug. 2, 1892
479,795	Fortier, C. L	Valve controllers	Aug. 2, 1892
479,802	Haesler, F. J	Magneto-electric	Aug. 2, 1892
479,804	Hatch, E. B. and Colton, C. A	Electro-magnets	Aug. 2, 1892
479,809	Johnson, E. H	Railways, systems, closed conduit	Aug. 2, 1892
479,814	Kennedy, R	Heaters	Aug. 2, 1892
479,821	Lundberg, A. P	Cut-outs, mechanical, rotary	Aug. 2, 1892
479,825	Mattison, J. D	Velocipedes	Aug. 2, 1892
479,828	Mumford, E. H	Steering and propulsion	Aug. 2, 1892
479,834	Espinosa, Y. J. O	Telegraphy, circuit closers	Aug. 2, 1892
479,835	Osburn, H. G	Batteries, secondary	Aug. 2, 1892
479,849	Sheperd, T. W	Telegraphy, circuit closers, thermal	Aug. 2, 1892
479,859	Tucker, A. F	Telegraphy, keys	Aug. 2, 1892
479,886	Krotz, A. S	Regulators	Aug. 2, 1892
479,887	De Lalande, F	Batteries, galvanic	Aug. 2, 1892
479,928	Wilson, A. J	Railway signals, block	Aug. 2, 1892
479,932	Brillie, L. V	Meters	Aug. 2, 1892
479,941	Henry, W	Friction generators	Aug. 2, 1892
479,948	Loomis, F. F	Motors, reciprocating	Aug. 2, 1892
479,949	Loomis, F. F	Cut-outs, mechanical, rotary	Aug. 2, 1892
479,950	Loomis, F. F	Annunciators, step-by-step	Aug. 2, 1892
479,951	Marvin, H. N	Transmission of power	Aug. 2, 1892
479,960	Van Depoele, C. J	do	Aug. 2, 1892
479,962	Van Depoele, C. J	do	Aug. 2, 1892
479,963	Van Depoele, C. J	do	Aug. 2, 1892
479,964	Van Depoele, C. J	do	Aug. 2, 1892
479,965	Van Depoele, C. J	Pile drivers	Aug. 2, 1892
479,966	Van Depoele, C. J	Transmission of power	Aug. 2, 1892
480,004	Baker, C. H	Railways, systems, conduit	Aug. 2, 1892
480,009	Furgang, R	Lighting, systems	Aug. 2, 1892
480,011	Green, J. J	Insulators	Aug. 2, 1892
480,033	Poppowitsch, E	Batteries, galvanic	Aug. 2, 1892
480,038	Rudd, C. H	Lighting, systems, tests	Aug. 2, 1892
480,039	Rudd, C. H	Galvanometers	Aug. 2, 1892
480,049	Warner, E. P	Magneto-electric	Aug. 2, 1892
480,050	Warner, E. P	Lights, arc, gravity feed, clutch	Aug. 2, 1892
480,073	Crabtree, L. T	Annunciators	Aug. 2, 1892
480,099	Hull, W. S	Alarms, burglar	Aug. 2, 1892
480,100	Hull, W. S	do	Aug. 2, 1892
480,147	Stewart, J. B	Railway signals, sectional rail	Aug. 2, 1892
480,151	Tobey, C. W	Rheostats	Aug. 2, 1892
480,152	Tobey, C. W	Connectors	Aug. 2, 1892
480,201	Meadows, C. A	Lamps and gas fittings, side reflectors	Aug. 2, 1892
480,240	Purple, G. E. and C. W	Railways, systems, overhead, trolley	Aug. 2, 1892
480,266	Knowles, E. R	Batteries, secondary	Aug. 9, 1892
480,272	Nichols, E. J	Air and gas engines	Aug. 9, 1892
480,284	Scharf, P	Lights, incandescent	Aug. 9, 1892
480,285	Schmit, C	Lights, arc, gravity feed, gear-clutch	Aug. 9, 1892
480,319	Conover, G. W	Bells	Aug. 9, 1892
480,340	Neal, F. H. and Donnelly, J. R	Alarms, burglar	Aug. 9, 1892
480,369	Linville, S. R	Lighting, systems	Aug. 9, 1892
480,372	Myers, G. F	Lighting, systems, car	Aug. 9, 1892
480,375	Selden, C	Lighting, systems	Aug. 9, 1892
480,384	Dow, H. H	Batteries, galvanic	Aug. 9, 1892
480,392	Thomson, E	Heaters	Aug. 9, 1892
480,393	Vineing, H. E	Regulators	Aug. 9, 1892
480,409	Lineoff, A. L	Railways, systems, closed conduit	Aug. 9, 1892
480,411	Patenall, T. H	Railway signals, block systems	Aug. 9, 1892
480,470	Maier, J	Street light hangers	Aug. 9, 1892
480,475	McClaren, A. E	Telegraphy, keys	Aug. 9, 1892
480,491	Cutten, E. B	Electrolysis, aqueous bath, chemicals	Aug. 9, 1892
480,492	Cutten, E. B	do	Aug. 9, 1892
480,493	Cntten, E. B	do	Aug. 9, 1892
480,507	Patenall, T. H	Railway signals, track instruments	Aug. 9, 1892
480,525	Sperry, E. A	Lights, arc, gravity feed, clutch	Aug. 9, 1892
480,526	Squires, H. S	Measuring instruments, passenger	Aug. 9, 1892
480,539	Wright, A	Lights, arc, special features	Aug. 9, 1892
480,543	Badt, F. B	Railways, systems, converters	Aug. 9, 1892

No.	NAME.	CLASS.	DATE.
480,546	Bates, L	Lock strikes, electric	Aug. 9, 1892
480,567	Edison, T. A	Telegraphy, quadruplex	Aug. 9, 1892
480,573	Flagg, S. H	Conductors, underground	Aug. 9, 1892
480,575	Gandino, G	Batteries, secondary	Aug. 9, 1892
480,576	Gardner, W. F	Clocks, electric	Aug. 9, 1892
480,577	Gardner, W. F	do	Aug. 9, 1892
480,644	Willoughby, C	Telegraphy, transmitters	Aug. 9, 1892
480,651	Baumhoff, G. W	Cut-outs, thermal	Aug. 9, 1892
480,656	Christy, J. A	Telephones, electric	Aug. 9, 1892
480,673	Rothlisberger, E	Alarms	Aug. 9, 1892
480,678	Thomas, C. W	Dental instruments	Aug. 9, 1892
480,681	Wheeler, S. S	Electro-magnets	Aug. 9, 1892
480,683	Wollensack, J. F	Telegraphy, circuit closers	Aug. 9, 1892
480,689	Bradford, C. W	Telegraphy, keys	Aug. 9, 1892
480,694	Gibbs, J. S	Cut-outs, mechanical, rotary	Aug. 9, 1892
480,720	Goold, F. D. A	Lamps and gas fittings, street lamps	Aug. 16, 1892
480,721	Goold, F. D. A	Lights, arc, gravity feed, clutch	Aug. 16, 1892
480,722	Goold, F. D. A	Cut-outs, mechanical, oscillating snap	Aug. 16, 1892
480,727	Kolben, E	Magneto-electric	Aug. 16, 1892
480,728	Kolben, E	do	Aug. 16, 1892
480,729	Lane, T. W	Annunciators, drop	Aug. 16, 1892
480,739	Parshall, H. F	Magneto-electric	Aug. 16, 1892
480,740	Parshall, H. F	do	Aug. 16, 1892
480,745	Robb, J. T	Cut-outs, thermal	Aug. 16, 1892
480,747	Shaffer, H. C	Fire engines, stationary	Aug. 16, 1892
480,749	Stanley, L. T	Lights, incandescent, special features	Aug. 16, 1892
480,762	Cherry, H. H. and Youngslove, S. D.	Magneto-electric	Aug. 16, 1892
480,766	Fortin, C	Railways, systems, overhead, trolley	Aug. 16, 1892
480,780	Pfannkuche, G	Magneto-electric	Aug. 16, 1892
480,782	Quirk, M. J. and Bach, C., jr	Cut-outs, mechanical, sliding	Aug. 16, 1892
480,787	Scott, W	Lights, incandescent, special features	Aug. 16, 1892
480,794	Unwin, P. J. and Howard, H	Metal working, heating	Aug. 16, 1892
480,802	Blathy, O. T	Cut-outs, thermal	Aug. 16, 1892
480,804	Bryson, A., jr	Railways, systems, telpher	Aug. 16, 1892
480,805	Bryson, A., jr	Pneumatics, rail, dispatch tubes	Aug. 16, 1892
480,813	Enos, A. T	Lights, incandescent, special features	Aug. 16, 1892
480,845	Herdman, F. E	Elevators	Aug. 16, 1892
480,846	Herdman, F. E	do	Aug. 16, 1892
480,850	Hunter, R. M	Railways, systems, closed conduit	Aug. 16, 1892
480,883	Usher, E. P	Batteries, secondary	Aug. 16, 1892
480,884	Usher, E. P	do	Aug. 16, 1892
480,885	Usher, E. P	do	Aug. 16, 1892
480,886	Usher, E. P	do	Aug. 16, 1892
480,887	Usher, E. P	do	Aug. 16, 1892
480,888	Weston, E	Galvanometers	Aug. 16, 1892
480,889	Weston, E	do	Aug. 16, 1892
480,890	Weston, E	Clocks, electric	Aug. 16, 1892
480,891	Weston, E	Galvanometers	Aug. 16, 1892
480,892	Weston, E	Rheo-tats	Aug. 16, 1892
480,893	Weston, E	do	Aug. 16, 1892
480,894	Weston, E	Galvanometers	Aug. 16, 1892
480,895	Weston, E	do	Aug. 16, 1892
480,896	Weston, E	do	Aug. 16, 1892
480,897	Weston, E	do	Aug. 16, 1892
480,898	Weston, E	do	Aug. 16, 1892
480,899	Weston, E	do	Aug. 16, 1892
480,900	Weston, E	Lights, sockets and keys	Aug. 16, 1892
480,915	Buffinton, E. N	Lights, special features	Aug. 16, 1892
480,918	Eikemeyer, R	Electric locomotives	Aug. 16, 1892
480,947	Howell, J. W	Galvanometers	Aug. 16, 1892
480,948	Hutchinsou, J	Cut-outs, mechanical	Aug. 16, 1892
480,954	Melick, G. F	Lights, incandescent	Aug. 16, 1892
480,968	Schefbauer, R	Lights, arc, gravity feed, gear-clutch	Aug. 16, 1892
480,980	Turner, A. G	Running gear	Aug. 16, 1892
480,981	Warner, E. P	Dynamometers	Aug. 16, 1892
480,988	Ball, H. P	Lights, sockets and keys	Aug. 16, 1892
481,019	Ford, B	do	Aug. 16, 1892
481,025	Harrington, W. E	Connectors	Aug. 16, 1892
481,030	Howard, H	Metal working, heating	Aug. 16, 1892
481,042	Merritt, G	Telegraphy, railway car	Aug. 16, 1892
481,047	McQuat, E	Lights, incandescent	Aug. 16, 1892
481,048	Noriega, E	Telephones, electric	Aug. 16, 1892
481,049	Noriega, E	do	Aug. 16, 1892
481,050	Noriega, E	do	Aug. 16, 1892
481,051	Noriega, E	do	Aug. 16, 1892
481,062	Sayer, R. C	Railway signals, cab, sectional rail	Aug. 16, 1892
481,075	Stieus, P	Batteries, galvanic	Aug. 16, 1892

No.	NAME.	CLASS.	DATE.
481,114	Lott, W. F.	Telegraphy, keys	Aug. 16, 1892
481,120	Pickernell, F. A.	Annunciators, drop	Aug. 16, 1892
481,132	Bowen, W. J.	Insulators	Aug. 16, 1892
481,133	Bowen, W. J.	Telephones, mechanical	Aug. 16, 1892
481,138	Brown, F. H.	Telephones, magnetic	Aug. 16, 1892
481,204	Shea, C. A.	Telephones, systems, details	Aug. 23, 1892
481,220	Bradley, C. S. and Wood, J. J.	Magneto-electric	Aug. 23, 1892
481,223	Cords, A. B. and W. H.	Indicators	Aug. 23, 1892
481,246	Seymour, A. P.	Lights, incandescent, special features	Aug. 23, 1892
481,247	Smith, J. G.	Telegraphy, multiplex	Aug. 23, 1892
481,281	Page, A. D.	Lighting, systems	Aug. 23, 1892
481,284	Rettig, A.	Telephones, magnetic	Aug. 23, 1892
481,285	Salisk, C. J. and Lipp, E.	Lamps and gas fittings, globes	Aug. 23, 1892
481,291	Ahearn, T.	Heaters	Aug. 23, 1892
481,293	Bailey, J. R. and Lincoln, L. C.	Telephones, supports	Aug. 23, 1892
481,297	Clark, J. H.	Motors, hand operating device	Aug. 23, 1892
481,364	Manton, H. L.	Indicators, rotary	Aug. 23, 1892
481,378	Stanley, L. T.	Canopy shades and reflectors	Aug. 23, 1892
481,381	Wright, A.	Lights, arc, special features	Aug. 23, 1892
481,386	Baxter, W., jr.	Elevators	Aug. 23, 1892
481,401	Jenkins, W. F.	Railways, systems, conduit	Aug. 23, 1892
481,402	Jenkins, W. F.	do	Aug. 23, 1892
481,403	Jenkins, W. F.	do	Aug. 23, 1892
481,430	Slater, W. W. and Barnes, H. C.	Railway signals, block	Aug. 23, 1892
481,457	Wylie, A. J.	Insulators	Aug. 23, 1892
481,474	Conkling, G.	Separators	Aug. 23, 1892
481,483	Dyer, R. N.	Telephones, systems	Aug. 23, 1892
481,503	Merkins, J. S.	Railways, systems, overhead, trolley	Aug. 23, 1892
481,517	Walsh, J.	do	Aug. 23, 1892
481,529	Gibboney, J. W.	Telephones, electric	Aug. 23, 1892
481,560	Giscom, W. W.	Batteries, secondary	Aug. 30, 1892
481,573	La Roche, F. A.	Galvanometers	Aug. 30, 1892
481,590	Sachs, J.	Telegraphy, fire	Aug. 30, 1892
481,613	Chase, H. A.	do	Aug. 30, 1892
481,617	Freeman, J. P.	Cut-outs, electro-magnetic	Aug. 30, 1892
481,624	Pass, J. and Seymour, A. P.	Lighting, ceiling block	Aug. 30, 1892
481,646	Beers, F. H.	Motors	Aug. 30, 1892
481,664	Engledue, W. J.	Batteries, galvanic	Aug. 30, 1892
481,665	Furgang, R.	Lighting, systems	Aug. 30, 1892
481,666	Furgang, R.	do	Aug. 30, 1892
481,676	Sharp, C. C.	Electrolysis, ozone	Aug. 30, 1892
481,677	Scribner, C. E.	Lights, arc, gravity feed, clutch	Aug. 30, 1892
481,678	Scribner, C. E.	Telephones, systems	Aug. 30, 1892
481,679	Scribner, C. E.	Telephones, systems, multiple switch-board, test.	Aug. 30, 1892
481,683	Aylsworth, J. W. and Payne, A. C.	Amalgamators, electric mills	Aug. 30, 1892
481,692	Eastman, W. J.	Igniting devices, manual	Aug. 30, 1892
481,701	Lundell, R.	Motors	Aug. 30, 1892
481,711	Bessey, M. W.	Alarms, burglar	Aug. 30, 1892
481,726	Clute, V. S.	Knitting and netting, stopping	Aug. 30, 1892
481,739	Sprague, F. J.	Motors, hand operating devices	Aug. 30, 1892
481,775	Athunson, L. B. and C. W.	Mining machines	Aug. 30, 1892
481,781	Carpenter, C. E.	Rheostats	Aug. 30, 1892
481,785	Cravath, P.	Lighting, systems	Aug. 30, 1892
481,814	Overholt, F.	Lights, incandescent, special features	Aug. 30, 1892
481,817	Platt, S. L.	Railways, systems, conduit	Aug. 30, 1892
481,833	Sharpsteen, S. H.	Hoisting, elevated carrier	Aug. 30, 1892
481,842	De Bovet, A.	Car brakes	Aug. 30, 1892
481,847	Coffee, A. J.	Telegraphy, fire, non-interfering	Aug. 30, 1892
481,878	Thomson, E.	Telephones, systems	Aug. 30, 1892
481,904	Huber, E.	Lighting, systems	Aug. 30, 1892
481,905	Hunter, R. M.	Railways, systems, conduit	Aug. 30, 1892
481,912	Noll, A.	Conductors	Aug. 30, 1892
481,913	Noll, A.	do	Aug. 30, 1892
481,914	Noll, A.	Connectors	Aug. 30, 1892
481,916	Brokhoroff, W.	Clocks, electric	Aug. 30, 1892
481,919	Benner, F.	Annunciators, time	Aug. 30, 1892
11,266	Andrews, W. S. and Spenser, T. (Reis.)	Magneto-electric	Aug. 30, 1892
481,921	Atkinson, L. B., Ravenchaw, H. W. and Mori, F.	Mining machines	Sept. 6, 1892
481,959	Lawrence, R.	Railways, systems, conduit	Sept. 6, 1892
481,956	Kimball, G. A.	Railways, systems, overhead, trolley	Sept. 6, 1892
481,975	Shallenberger, O. B.	Meters	Sept. 6, 1892
481,979	Stanley, L. T.	Electrolysis, purifying liquids, water	Sept. 6, 1892
481,988	Weyburn, E. D.	Applications, tools and machines	Sept. 6, 1892
481,989	Wilson, H. T.	Telegraphy, circuit closers, thermal	Sept. 6, 1892
481,999	Berliner, E.	Pyro-magnets, electric devices	Sept. 6, 1892

NO.	NAME.	CLASS.	DATE.
482,012	Knowles, E. R.	Batteries, secondary	Sept. 6, 1892
482,015	Lillard, G. T. and Erhard, W.	Telegraphy, printing	Sept. 6, 1892
482,031	Adams, C. A. and Thorp, T. J.	Railways, systems, overhead, trolley	Sept. 6, 1892
482,032	Alcock, A. W.	Galvanometers	Sept. 6, 1892
482,043	Kennedy, P. and Diss, C. J.	Batteries, secondary	Sept. 6, 1892
482,044	Kennedy, P. and Thorp, C. J.	do	Sept. 6, 1892
482,074	Capek, J. V.	Heaters	Sept. 6, 1892
482,093	Lawrence, H. W.	Rheostats	Sept. 6, 1892
482,104	Stieringer, L.	Lights, special features	Sept. 6, 1892
482,112	Wight, A.	Street light hangers	Sept. 6, 1892
482,126	Henry, J. M. and Wilson, R. B.	Telegraphy, railway car	Sept. 6, 1892
482,129	Ludwig, D. J.	Telegraphy, relays and sounders	Sept. 6, 1892
482,136	Richards, W. S.	Telegraphy, circuits and systems	Sept. 6, 1892
482,137	Richards, W. S.	Telegraphy, relays and sounders	Sept. 6, 1892
482,139	Roberts, E. F.	Valve controllers	Sept. 6, 1892
482,148	Badt, F. B.	Alarms	Sept. 6, 1892
482,149	Barrett, J. A.	Conductors, anti-inductive	Sept. 6, 1892
482,150	Barrett, J. A.	do	Sept. 6, 1892
482,151	Barrett, J. A.	do	Sept. 6, 1892
482,152	Barrett, J. A.	do	Sept. 6, 1892
482,157	Birch, J. T.	Lights, arc, positive feed, gear-clutch	Sept. 6, 1892
482,171	Guaso, A. F. and Chusin, A.	Indicators	Sept. 6, 1892
482,172	Hamilton, J. E.	Igniting devices, manual	Sept. 6, 1892
482,174	Hibbard, A. T.	Telephones, divided central	Sept. 6, 1892
482,177	Holmes, P. H.	Lights, filaments and carbons	Sept. 6, 1892
482,181	Kellom, C. F.	Connectors	Sept. 6, 1892
482,209	Thomson, E.	Meters	Sept. 6, 1892
482,240	Gaston, J. E.	Lights, arc, positive feed, gear-clutch	Sept. 6, 1892
482,251	Heyser, E. A.	Time checks	Sept. 6, 1892
482,253	Kester, J. T.	Lights, arc, gravity feed, clutch	Sept. 6, 1892
482,263	Moore, E. D.	Annunciators, drop	Sept. 6, 1892
482,265	Nebel, J.	Magneto-electric	Sept. 6, 1892
482,270	O'Connor, T. F. and Marsh, J. W.	Conductors, underground	Sept. 6, 1892
482,297	Clark, W. H.	Insulators	Sept. 6, 1892
482,306	Hall, C. K.	Telegraphy, railway car	Sept. 6, 1892
482,323	Seymour, C. E.	Separators	Sept. 6, 1892
482,324	Teague, F.	Meters	Sept. 6, 1892
482,325	Tyner, J. M. C. and Irving, S. S.	Railways, systems, overhead, trolley	Sept. 6, 1892
482,328	Barrett, J. A.	Conductors, anti-inductive	Sept. 6, 1892
482,339	Crolus, E. R.	Lights, incandescent, special features	Sept. 13, 1892
482,343	Dupus, G. A.	Railways, systems, closed conduit	Sept. 13, 1892
482,374	Mailloux, C. O.	Cut-outs, electro-magnetic	Sept. 13, 1892
482,397	Thomson, E.	Magneto-electric	Sept. 13, 1892
482,420	Compton, M. D.	Telegraphy, circuit closers, thermal	Sept. 13, 1892
482,421	Cory, C.	Indicators	Sept. 13, 1892
482,422	Danley, R. J. M.	Railway signals, sectional rail	Sept. 13, 1892
482,423	Danley, R. J. M.	do	Sept. 13, 1892
482,425	Ekert, T. T.	Batteries, galvanic	Sept. 13, 1892
482,433	Atkinson, L. B.	Lighting, systems	Sept. 13, 1892
482,435	Cutter, H. H.	Lights, arc, gravity feed, gear-clutch	Sept. 13, 1892
482,440	Maver, W., jr.	Telegraphy, relays and sounders	Sept. 13, 1892
482,444	Washburn, W. E.	Batteries, galvanic	Sept. 13, 1892
482,464	Wilson, H. T.	Alarms, burglar	Sept. 13, 1892
482,486	Pfluger, C. H.	Lights, incandescent, special features	Sept. 13, 1892
482,506	Fisher, J.	Railways, systems, conduit	Sept. 13, 1892
482,535	Weber, A.	Lights, arc, special features	Sept. 13, 1892
482,549	Edison, T. A.	Regulators	Sept. 13, 1892
482,568	Bigland, H. H. and Burns, J.	Lights, arc, gravity feed, gear-clutch	Sept. 13, 1892
482,586	Parker, T.	Furnaces, electric	Sept. 13, 1892
482,594	Soley, W. H. and Perkins, W. W.	Electric locomotives	Sept. 13, 1892
482,668	Woolley, L. G.	Inductariums, induction coils	Sept. 13, 1892
482,699	Scott, W.	Time signals	Sept. 13, 1892
482,719	Blackwell, F. O.	Railways, systems, conduit	Sept. 20, 1892
482,724	Craney, T.	Electrolysis, aqueous bath, anodes	Sept. 20, 1892
482,727	Dillon, T.	Lights, arc, special features	Sept. 20, 1892
482,753	Reed, T. L.	Conductors	Sept. 20, 1892
482,778	Barnard, G. L.	Alarms	Sept. 20, 1892
482,780	Boughton, C. V.	Lighting, systems	Sept. 20, 1892
482,820	Warner, E. P.	Lights, arc, special features	Sept. 20, 1892
482,825	Eikemeyer, R.	Magneto-electric	Sept. 20, 1892
482,863	Conradson, C. M.	Electric locomotives	Sept. 20, 1892
482,872	Lee, C. T.	Insulators	Sept. 20, 1892
482,877	Pearce, F.	Telegraphy, fire, variable signal, dial	Sept. 20, 1892
482,879	Purdy, F.	Tempering and annealing	Sept. 20, 1892
482,902	Guerrant, G. M.	Applications, general	Sept. 20, 1892
482,913	Brooks, H. H.	Insulators	Sept. 20, 1892
482,917	Dix, H. S.	Cordage, packaging braid and yarn	Sept. 20, 1892

No.	NAME.	CLASS.	DATE.
482,936	Wright, A.	Cut-outs, oscillating snap	Sept. 20, 1892
482,940	Bossert, W. F. and Findlay, J. H.	Lights, arc, special features	Sept. 20, 1892
482,964	Hunter, R. M.	Railways, systems, conduit	Sept. 20, 1892
482,974	Blathy, O. T.	Motors, alternating	Sept. 20, 1892
482,979	Knowles, E. R.	Batteries, secondary	Sept. 20, 1892
482,986	Stuart, J. A.	Lights, arc, gravity feed, gear-clutch	Sept. 20, 1892
482,993	Bunce, L. P.	Railways, systems, closed conduit	Sept. 20, 1892
483,044	Clift, J.	Canopy, shades and reflectors	Sept. 20, 1892
483,050	Fitzmaurice, J. S.	Printing, branding stamps	Sept. 20, 1892
483,061	Hough, J. C.	Railways, systems, overhead, trolley	Sept. 20, 1892
483,074	Marsh, J. W.	Conductors	Sept. 20, 1892
483,108	Franke, A.	Valve controllers	Sept. 20, 1892
483,123	Russell, G. W. and Minor, D. B.	Cut-outs, electro-magnets	Sept. 20, 1892
483,124	Ahearn, T.	Heaters	Sept. 27, 1892
483,151	Hoggson, S. H.	Printing, hand stamps	Sept. 27, 1892
483,162	Muller, F.	Coin-controlled apparatus	Sept. 27, 1892
483,168	Rudd, C. H.	Galvanometers	Sept. 27, 1892
483,175	Scribner, C. E.	Telephones, systems, multiple switch-board, test.	Sept. 27, 1892
483,179	Sturtevant, T. L.	Mill stone dress mills	Sept. 27, 1892
483,187	Waterhouse, A. G.	Meters	Sept. 27, 1892
483,203	Bassett, N. C.	Elevators	Sept. 27, 1892
483,204	Bassett, N. C.	Electric locomotives	Sept. 27, 1892
483,231	Loy, I. W. and O'Toole, R.	Railway signals, track instruments	Sept. 27, 1892
483,235	McMunn, L. D.	Cut-outs, mechanical, sliding	Sept. 27, 1892
483,272	Vinening, H. E.	Telephones, calls, step-by-step	Sept. 27, 1892
483,285	Guilleaume, T.	Conductors	Sept. 27, 1892
483,309	Raymond, N. H.	Bells	Sept. 27, 1892
483,310	Raymond, N. H.	Annunciators	Sept. 27, 1892
483,316	Alden, S. F.	Cut-outs, mechanical, rotary	Sept. 27, 1892
483,327	Purcell, J. J.	Connectors	Sept. 27, 1892
483,339	Beers, I. F. and F. C.	Telegraphy, circuit closers, thermal	Sept. 27, 1892
483,366	Ricker, A. L.	Railways, systems, converter	Sept. 27, 1892
483,388	Prewitt, W. Q.	Railways, conductor supports and insulators	Sept. 27, 1892
483,423	Coffin, C. L.	Heating, metal working	Sept. 27, 1892
483,424	Coffin, C. L.	do	Sept. 27, 1892
483,425	Coffin, C. L.	do	Sept. 27, 1892
483,426	Coffin, C. L.	do	Sept. 27, 1892
483,427	Coffin, C. L.	do	Sept. 27, 1892
483,428	Coffin, C. L.	do	Sept. 27, 1892
483,431	Dreskell, W. M.	Motors	Sept. 27, 1892
483,482	Elridge, H.	Lamps and gas fittings, globes	Sept. 27, 1892
483,494	Hunter, R. M.	Railways, systems, overhead	Sept. 27, 1892
483,506	Bell, O. A.	Telephones, systems	Sept. 27, 1892
483,545	Cutten, E. B.	Motors	Oct. 4, 1892
483,556	Holt, H. L.	Lamps and gas fittings, harps and hangers	Oct. 4, 1892
483,562	Knowles, E. R.	Batteries, secondary	Oct. 4, 1892
483,563	Knowles, E. R.	do	Oct. 4, 1892
483,564	Korsmeyer, E. H.	Printing, oscillating	Oct. 4, 1892
483,582	Riker, A. L.	Motors	Oct. 4, 1892
483,625	Wilson, H. T.	Bells	Oct. 4, 1892
483,654	Johnson, H. T.	Batteries, galvanic	Oct. 4, 1892
483,689	Hoppers, J. J.	Railways, systems, overhead, trolley	Oct. 4, 1892
483,692	Lehman, A. J.	Batteries, galvanic	Oct. 4, 1892
483,700	Thomson, E.	Magneto-electric	Oct. 4, 1892
483,704	Armstrong, D. H.	Cut-outs, mechanical, rotary	Oct. 4, 1892
483,708	Bassett, N. C.	Magneto-electric	Oct. 4, 1892
483,712	Eckstrom, A.	Cut-outs, mechanical	Oct. 4, 1892
483,713	Eckstrom, A.	do	Oct. 4, 1892
483,718	Gross, F.	Telephones, details	Oct. 4, 1892
483,725	Rogers, C. W.	Applications, general	Oct. 4, 1892
483,728	Stromberg, A.	Alarms, burglar	Oct. 4, 1892
483,729	Warner, E. P.	Magneto-electric	Oct. 4, 1892
483,732	Bassett, N. C.	do	Oct. 4, 1892
483,739	Green, C.	Lighting, systems	Oct. 4, 1892
483,758	Appleyard, A. E.	Heaters	Oct. 4, 1892
483,759	Appleyard, A. E.	do	Oct. 4, 1892
483,761	Creighton, W. G.	Railways, systems, closed conduit	Oct. 4, 1892
483,768	Rolfe, C. A.	Telegraphy, fire	Oct. 4, 1892
483,771	Seymour, A. P.	Insulators	Oct. 4, 1892
483,782	Giraud, P.	Batteries, thermal	Oct. 4, 1892
483,806	Hull, W. S.	Insulators	Oct. 4, 1892
483,816	Stanley, W. and Kelley, J. F.	Motors, alternating	Oct. 4, 1892
483,822	Willson, T. L.	Electric locomotives	Oct. 4, 1892
483,844	Hopkins, N. M.	Alarms, burglar	Oct. 4, 1892
483,856	Murphy, W. G.	Railways, systems, conduit	Oct. 4, 1892
483,862	Paiste, H. T.	Cut-outs, mechanical, rotary	Oct. 4, 1892

No.	NAME.	CLASS.	DATE.
483,940	Perkins, F. B. and Jones, C. S.	Heaters	Oct. 4, 1892
483,974	Allam, E. P.	Lights, sockets and keys	Oct. 4, 1892
483,999	Fiske, B. A.	Distance instruments	Oct. 11, 1892
484,045	Perrine, F. A. C.	Conductors	Oct. 11, 1892
484,068	Urbain, E.	Railway signals, block systems	Oct. 11, 1892
484,077	Wirt, C.	Ceiling blocks	Oct. 11, 1892
484,096	Hoffman, J. W.	Batteries, galvanic	Oct. 11, 1892
484,110	McElroy, J. F.	Lighting, systems	Oct. 11, 1892
484,120	Silvey, W. L.	Batteries, secondary	Oct. 11, 1892
484,123	Stone, C. A. and Webster, E. S.	Railways, systems	Oct. 11, 1892
484,140	Cortland, H.	Telegraphy, fire, automatic	Oct. 11, 1892
484,150	Forbes, C. S.	Telephones, magnetic	Oct. 11, 1892
484,182	Dewey, M. W.	Heaters	Oct. 11, 1892
484,183	Edison, T. A.	Meters	Oct. 11, 1892
484,184	Edison, T. A.	Lights, filaments and carbons	Oct. 11, 1892
484,185	Edison, T. A.	do	Oct. 11, 1892
484,199	Hayes, J. A.	Lights, arc, gravity feed, clutch	Oct. 11, 1892
484,205	Hunter, J. H. and Lucock, J. S.	Railway signals	Oct. 11, 1892
484,206	James, W. H.	Telegraphy, fire	Oct. 11, 1892
484,207	Klein, C. J.	Lights, sockets and keys	Oct. 11, 1892
484,208	Leonard, H. W.	Lighting, systems, car	Oct. 11, 1892
484,209	Locke, F. M.	Insulators	Oct. 11, 1892
484,232	Nolley, D. D.	Alarms, burglar	Oct. 11, 1892
484,233	Nolley, D. D.	do	Oct. 11, 1892
484,280	Anderson, A.	Railways, conductor supports and insulators	Oct. 11, 1892
484,344	Smith, E. B.	Railways, systems, overhead, trolley	Oct. 11, 1892
484,375	Reilley, M. S.	Telegraphy, railway car	Oct. 11, 1892
484,380	Utley, M. R.	Cut-outs, mechanical	Oct. 11, 1892
484,386	D'Almeida, J. J. and Da Silva, J. Y.	Telegraphy, circuit closers, thermal	Oct. 18, 1892
484,449	Page, D. S. and Bertsch, J. L.	Signal lamps	Oct. 18, 1892
484,450	Page, D. S.	Lights, incandescent, special features	Oct. 18, 1892
484,479	Ward, B. B.	Lighting, systems	Oct. 18, 1892
484,480	Ward, B. B.	Lights, arc, special features	Oct. 18, 1892
484,483	Wirt, C.	Lights, incandescent, special features	Oct. 18, 1892
484,530	Coerper, C.	Lights, arc, gravity feed, gear-clutch	Oct. 18, 1892
484,532	Gardner, A. D.	Heaters	Oct. 18, 1892
484,535	Howard, F. H.	Electrolysis, aqueous bath, depolarizing bur- nishing.	Oct. 18, 1892
484,543	Pyke, L. S. M. and Barnett, H. T.	Inductariums, transformers, stationary	Oct. 18, 1892
484,544	Pyke, L. S. M. and Barnett, H. T.	do	Oct. 18, 1892
484,545	Stanley, W. and Kelman, J. H.	Cut-outs, thermal	Oct. 18, 1892
484,549	Brace, De Witt B.	Transmission of power	Oct. 18, 1892
484,553	Jones, L. L.	Lights, filaments and carbons	Oct. 18, 1892
484,574	Venker, J. B.	Heaters	Oct. 18, 1892
484,580	Bergmann, S.	Lights, sockets and keys	Oct. 18, 1892
484,611	Scribner, C. E.	Regulators	Oct. 18, 1892
484,612	Scribner, C. E.	Telephones, systems, multiple switch-board, test.	Oct. 18, 1892
484,613	Scribner, C. E.	Telephones, systems	Oct. 18, 1892
484,614	Seaton, B. C.	Railway signals, cab, sectional rail	Oct. 18, 1892
484,618	Smith, S. D.	Medical and surgical, exercising apparatus	Oct. 18, 1892
484,626	Carty, J. J.	Telephones, systems	Oct. 18, 1892
484,637	Hunter, J. H.	Tempering and annealing, application of electricity.	Oct. 18, 1892
484,724	Smith, A. W.	Magneto-electric	Oct. 18, 1892
484,762	Thorn, J. E.	Bells	Oct. 18, 1892
484,778	Collier, A. T.	Telephones, electric	Oct. 25, 1892
484,785	Evershed, S.	Magneto-electric	Oct. 25, 1892
484,796	Hunter, G. E.	Watch balances	Oct. 25, 1892
484,797	Hyatt, J. W.	do	Oct. 25, 1892
484,822	Rhodes, H. A.	Cut-outs, thermal	Oct. 25, 1892
484,825	Smith, F. S.	Lights, incandescent	Oct. 25, 1892
484,865	Sanford, C. E.	Cut-outs, electro-magnetic	Oct. 25, 1892
484,867	Scribner, C. E.	Telephones, systems	Oct. 25, 1892
484,877	Eames, H. H.	Separators	Oct. 25, 1892
484,911	Green, J. J.	Ceiling blocks	Oct. 25, 1892
484,919	Pendleton, J. H.	Railways, systems, circuits, multiple arc	Oct. 25, 1892
484,924	Sutton, B. F.	Railways, systems, closed conduit	Oct. 25, 1892
484,959	Gutmann, L.	Induction coils	Oct. 25, 1892
484,964	Hills, L.	Lights, arc, special features	Oct. 25, 1892
484,986	Wood, M. M.	Railways, systems, overhead, trolley	Oct. 25, 1892
484,990	Blackman, H.	Electrolysis, aqueous bath, chemicals	Oct. 25, 1892
485,017	Ries, E. E.	Heating, soldering	Oct. 25, 1892
485,027	Benjamin, G. V.	Telephones, supports	Oct. 25, 1892
485,054	Pfannkuche, G.	Regulators	Oct. 25, 1892
485,089	Carhart, H. S.	Batteries, galvanic	Oct. 25, 1892
485,105	Lee, C. T.	Railways, conductor supports and insulators	Oct. 25, 1892

No.	NAME.	CLASS.	DATE.
485,106	Lee, C. T.	Railways, conductor supports and insulators	Oct. 25, 1892
485,181	Elkins, W. H.	Regulators	Nov. 1, 1892
485,220	Pepper, D., jr.	Magneto-electric	Nov. 1, 1892
485,221	Pocock, F. A.	Motors	Nov. 1, 1892
485,238	Thomas, E. M.	Medical and surgical, baths	Nov. 1, 1892
485,239	Thomson, E.	Regulators	Nov. 1, 1892
485,279	Jacques, W. W.	Telegraphy, circuits and systems	Nov. 1, 1892
485,287	McKay, W. H.	Lighting, systems	Nov. 1, 1892
485,293	Mosher, J. A.	Lights, arc, gravity feed, clutch	Nov. 1, 1892
485,311	White, A. C.	Telephones, electric	Nov. 1, 1892
485,319	Crowdus, W. A.	Batteries, galvanic	Nov. 1, 1892
485,327	Knowluis, E. R.	Lights, arc, gravity feed, gear-clutch	Nov. 1, 1892
485,334	Safford, A. G.	Telegraphy, relays and sounders	Nov. 1, 1892
485,343	Fletcher, C. R.	Electrolysis, aqueous bath, cathodes	Nov. 1, 1892
485,347	Jappy, H. and Helmer, O.	Lights, arc, gravity feed, gear-clutch	Nov. 1, 1892
485,351	McClellan, C. W.	Telegraphy, fire	Nov. 1, 1892
485,352	McIntosh, G.	Alarms	Nov. 1, 1892
485,367	Bosch, A.	Telegraphy, fire, engine-house apparatus	Nov. 1, 1892
485,379	Hard, J. R.	Bells	Nov. 1, 1892
485,425	O'Neill, H. G.	Lighting, systems	Nov. 1, 1892
485,473	McCart, J. and Judkins, A. G.	Railway signals, cab, sectional rail	Nov. 1, 1892
485,478	Pollard, E.	Lights, incandescent	Nov. 1, 1892
485,537	Edwards, E. A.	Lights, arc, gravity feed	Nov. 1, 1892
485,558	O'Neill, J. O.	Cut-outs, mechanical, rotary	Nov. 1, 1892
485,567	Ringen, J.	Coin-controlled apparatus, exhibitors, surface	Nov. 1, 1892
485,587	Potter, J. S. and Cartwright, D. J.	Lights, sockets and keys	Nov. 1, 1892
485,591	Tilden, J. A.	Time checks	Nov. 1, 1892
485,615	Edison, T. A.	Lights, filaments and carbons	Nov. 8, 1892
485,616	Edison, T. A.	do	Nov. 8, 1892
485,617	Edison, T. A.	do	Nov. 8, 1892
485,618	Farret, F.	Electrolysis, aqueous bath, apparatus	Nov. 8, 1892
485,619	Fiske, J. P. B.	Motors, hand operating devices	Nov. 8, 1892
485,620	Fiske, J. P. B.	do	Nov. 8, 1892
485,643	Moore, J. J. and Henry, D. A.	Telephones, switch-boards	Nov. 8, 1892
485,645	McAulis, J. D. and Fleming, H. E.	Clocks, electric	Nov. 8, 1892
485,647	Nichols, D. H. and Cotton, C. L. and C. A.	Lighting, systems, car	Nov. 8, 1892
485,658	Rice, E. W., jr.	Transmission of power	Nov. 8, 1892
485,659	Rice, E. W., jr.	do	Nov. 8, 1892
485,668	Stone, C. A. and Webster, E. S.	Railways, systems	Nov. 8, 1892
485,669	Thomson, E.	Inductoriums, transformers, rotary	Nov. 8, 1892
485,682	Carey, A. C.	Lights, incandescent	Nov. 8, 1892
485,744	Kirkegaard, G.	Lights, arc, gravity feed, gear-clutch	Nov. 8, 1892
485,754	Teeft, E. N.	Medical and surgical, body-wear	Nov. 8, 1892
485,767	Lewis, A. D.	Printing, autographic	Nov. 8, 1892
485,841	Edison, T. A.	Separators	Nov. 8, 1892
485,842	Edison, T. A.	do	Nov. 8, 1892
485,859	Bruening, W.	Telephones, magnetic	Nov. 8, 1892
485,876	McDonough, J. W.	Telephones, electric	Nov. 8, 1892
485,895	Steers, J. R.	Lights, arc, gravity feed, gear-clutch	Nov. 8, 1892
486,047	Lattig, J. W.	Railway signals, sectional rail	Nov. 8, 1892
486,051	Maret, J. and De Graff, W. L.	Telegraphy, relays and sounders	Nov. 8, 1892
486,054	Rodgers, W. H.	Alarms	Nov. 8, 1892
486,068	Allington, W. E.	Electric locomotives	Nov. 15, 1892
486,078	Bradley, C. S.	Magneto-electric	Nov. 15, 1892
486,094	Eickemeyer, R.	Batteries, secondary	Nov. 15, 1892
486,123	Perry, J.	Meters	Nov. 15, 1892
486,149	Wilder, E. R.	Alarms, burglar	Nov. 15, 1892
486,176	Burton, G. D. and Angell, E. E.	Metal working, heating	Nov. 15, 1892
486,206	Wilson, J. C.	Telegraphy, fire	Nov. 15, 1892
486,212	Leland, H. W.	Alarms, burglar	Nov. 15, 1892
486,213	Lundell, R.	Motors, hand operating devices	Nov. 15, 1892
486,214	Lundell, R.	Regulators	Nov. 15, 1892
486,215	Lundell, R.	Cut-outs, mechanical, rotary	Nov. 15, 1892
486,234	Parcelle, A. L.	Magneto-electric	Nov. 15, 1892
486,241	Warner, E. P.	Cut-outs, mechanical, oscillating spring	Nov. 15, 1892
486,243	Carter, F. S. and Stumpf, G. P.	Annunciators, drop systems	Nov. 15, 1892
486,244	Clamond, C.	Telephones, electric	Nov. 15, 1892
486,264	O'Lalor, J. J.	Batteries, galvanic	Nov. 15, 1892
486,270	Barrett, J. A.	Conductors	Nov. 15, 1892
486,282	Fuller, F. H. and Perkins, C. B.	Telegraphy, fire	Nov. 15, 1892
486,317	Wright, A. W.	Railways, systems, conduit	Nov. 15, 1892
486,332	Gipperich, A.	Telegraphy, circuits and systems	Nov. 15, 1892
486,333	Guilley, A. H. R.	Railways, conductor supports and insulators	Nov. 15, 1892
486,334	Hall, G. W. and De Marr, J. J.	Lights, sockets and keys	Nov. 15, 1892
486,338	Hull, H. A.	Alarms, burglar	Nov. 15, 1892
486,354	Ross, J. J.	Bells	Nov. 15, 1892
486,377	Higham, D.	Lights, arc, gravity feed, clutch	Nov. 15, 1892

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486,417	Dow, A	Regulators	Nov. 15, 1892
486,457	Frei, G. A.	Lights, incandescent	Nov. 22, 1892
486,477	Kinsman, F. E.	Railways, conductor supports and insulators	Nov. 22, 1892
486,488	Meissner, W. O.	Lights, arc, positive feed, gear-clutch	Nov. 22, 1892
486,498	Osburn, H. G.	Telegraphy, lightning arresters	Nov. 22, 1892
486,506	Scribner, C. E.	Telephones, systems	Nov. 22, 1892
486,507	Scribner, C. A.	Telephones, systems, multiple switch-board, test.	Nov. 22, 1892
486,524	Baehr, G.	Magneto-electric	Nov. 22, 1892
486,569	Ross, J. J.	Railway signals, block	Nov. 22, 1892
486,585	Lain, D. E.	Railways, conductor supports and insulators	Nov. 22, 1892
486,612	Hewitt, W. R.	Telegraphy, fire, engine house apparatus	Nov. 22, 1892
486,624	Burton, G. D. and Angell, E. E.	Heating, metal working	Nov. 22, 1892
486,625	Burton, G. D.	do	Nov. 22, 1892
486,626	Burton, G. D. and Angell, E. E.	do	Nov. 22, 1892
486,627	Burton, G. D. and Angell, E. E.	do	Nov. 22, 1892
486,634	Edison, T. A.	Telegraphy, railway car	Nov. 22, 1892
486,643	McElroy, J. F.	Systems of distribution	Nov. 22, 1892
486,644	McElroy, J. F.	Regulators	Nov. 22, 1892
486,656	Wood, J. J.	Magneto-electric	Nov. 22, 1892
486,689	Weston, E.	Galvanometers	Nov. 22, 1892
486,702	Decrow, W. E.	Telegraphy, fire	Nov. 22, 1892
486,715	Imlay, W. L.	Mills, ore and coal washers	Nov. 22, 1892
486,729	Miller, C. E.	Lamps and gas fittings, side reflectors	Nov. 22, 1892
486,757	Brockie, J.	Lights, arc, gravity feed, clutch	Nov. 22, 1892
486,807	Fowler, W.	Alarms	Nov. 22, 1892
486,818	Burton, G. D.	Heating, metal working	Nov. 22, 1892
486,820	Carter, F. S.	Annunciators, drop	Nov. 22, 1892
486,879	Lovett, T. J.	Separators	Nov. 29, 1892
486,888	Neal, A. D. and Eaton, H. F.	Telegraphy, printing, wheel	Nov. 29, 1892
486,902	Shults, J. W.	Medical and surgical, body-wear	Nov. 29, 1892
486,908	Stromberg, A.	Alarms, burglar	Nov. 29, 1892
486,909	Strowger, A. B.	Telephones, systems, automatic	Nov. 29, 1892
486,916	Thomson, E.	Inductoriums, transformers, stationary	Nov. 29, 1892
486,926	Buek, H. C.	Electro-magnets	Nov. 29, 1892
486,958	Scribner, C. E.	Lights, arc, gravity feed, clutch	Nov. 29, 1892
486,985	Olbricht, B.	Railways, systems, conduit	Nov. 29, 1892
486,987	Schultz, W. J.	Cut-outs, mechanical, oscillating spring	Nov. 29, 1892
487,002	Cutter, G.	Telegraphy, circuit closers, thermal	Nov. 29, 1892
487,022	Pfouts, L. S.	Lights, incandescent, special features	Nov. 29, 1892
487,046	Clegg, J.	Lights, filaments and carbons	Nov. 29, 1892
487,049	Görge, J. H. F.	Lights, incandescent	Nov. 29, 1892
487,069	Harrington, W. E.	Machine elements, gearing, belt	Nov. 29, 1892
487,070	Harrington, W. E.	do	Nov. 29, 1892
487,073	Lovett, T. J.	Separators	Nov. 29, 1892
487,074	Lovett, T. J.	do	Nov. 29, 1892
487,092	Nate, J. J.	Motors, hand operating devices	Nov. 29, 1892
487,093	Noxon, C. P. L.	Galvanometers	Nov. 29, 1892
487,095	Scribner, C. E.	Telegraphy, fire	Nov. 29, 1892
487,096	Scribner, C. E.	Telephones, systems, multiple switch-board, test.	Nov. 29, 1892
487,097	Scribner, C. E.	Telephones, systems, multiple switch-board, divided central.	Nov. 29, 1892
487,098	Scribner, C. E.	Telephones, systems, multiple switch-board, test.	Nov. 29, 1892
487,102	Stone, J. S.	Telephones, systems	Nov. 29, 1892
487,114	Conradson, C. M.	Electric locomotives	Nov. 29, 1892
487,128	Reynolds, H. W.	Alarms, burglar	Nov. 29, 1892
487,154	Parker, J. A. and Summers, L. L.	Telegraphy, automatic	Nov. 29, 1892
487,176	Coles, C. S. O.	Electrolysis, aqueous bath, alloys	Nov. 29, 1892
487,185	Johnson, J. H.	Medical and surgical, body-wear	Nov. 29, 1892
487,213	Elliott, C. B.	Lights, sockets and keys	Nov. 29, 1892
487,219	Hayes, H. V. and Richards, W. L.	Telephones, magnetic	Nov. 29, 1892
487,220	Hazeltine, C. W.	Lights, filaments and carbons	Nov. 29, 1892
487,227	Neal, A. D. and Eaton, H. E.	Telegraphy, printing	Nov. 29, 1892
487,228	Neal, A. D. and Eaton, H. E.	do	Nov. 29, 1892
487,229	Neal, A. D. and Eaton, H. E.	do	Nov. 29, 1892
487,242	Beers, F. H.	Motors	Dec. 6, 1892
487,275	Johnston, F. L. and Fletcher, W. C.	Speed measures	Dec. 6, 1892
487,285	Mitchell, W.	Heaters	Dec. 6, 1892
487,302	Thomson, E.	Heating, metal working	Dec. 6, 1892
487,306	Waring, J.	Rheostats	Dec. 6, 1892
487,307	Warner, E. P.	Magneto-electric	Dec. 6, 1892
487,315	Wood, J. J.	Lights, arc, gravity feed, gear-clutch	Dec. 6, 1892
487,324	Gethins, J. L.	Batteries, galvanic	Dec. 6, 1892
487,329	Jackson, C. A.	Electric locomotives	Dec. 6, 1892
487,332	Lindahl, H.	Railways, conductor supports and insulators	Dec. 6, 1892

No.	NAME.	CLASS.	DATE.
487,356	Tomlinson, T	Lighting, systems, hand regulation	Dec. 6, 1892
487,360	Applegate, E. W.	Lights, incandescent	Dec. 6, 1892
487,369	Lewis, E. C.	Telephones, supports	Dec. 6, 1892
487,390	Fröhlich, O.	Electrolysis, ozone	Dec. 6, 1892
487,437	Wagner, P.	Bells	Dec. 6, 1892
487,448	Osbourne, D. K.	Alarms, burglar	Dec. 6, 1892
487,462	Wood, J. J.	Magneto-electric	Dec. 6, 1892
487,477	Frei, G. A.	Lights, incandescent	Dec. 6, 1892
487,478	Frei, G. A.	do	Dec. 6, 1892
487,519	Elliott, F. O.	Telegraphy, circuit closers, thermal	Dec. 6, 1892
487,543	Sbullenberger, O. B.	Systems of distribution	Dec. 6, 1892
487,607	Coffin, C. L.	Heating, metal working	Dec. 6, 1892
487,634	McDermott, G. L.	Alarms	Dec. 6, 1892
487,644	Rogers, J. S.	Batteries, secondary	Dec. 6, 1892
487,654	Vanderpool, A. A.	Railways, systems, conduit	Dec. 6, 1892
487,655	Wandell, J. M.	Medical and surgical	Dec. 6, 1892
487,676	Martin, M.	Telegraphy, fire, variable signal, dial	Dec. 6, 1892
487,702	Abbott, W. H.	Speed measures	Dec. 13, 1892
487,703	Ayton, C. W.	Meters	Dec. 13, 1892
487,735	Hayden, J. W.	Railways, systems, conduit	Dec. 13, 1892
487,744	Jacob, A. P.	Gas lighting attachments	Dec. 13, 1892
487,745	Johnston, W. C.	Motors, mechanical, spring	Dec. 13, 1892
487,752	Kinsman, F. E.	Railway signals, cab, sectional rail	Dec. 13, 1892
487,755	Lundell, R.	Magneto-electric	Dec. 13, 1892
487,795	Taintor, G.	Telephones, systems, multiple switch-board	Dec. 13, 1892
487,796	Tesla, N.	Transmission of power	Dec. 13, 1892
487,808	Werling, J. and Agnew, J. F.	Railways, systems, overhead, trolley	Dec. 13, 1892
487,813	Wörner, A.	do	Dec. 13, 1892
487,816	Badt, F. B.	Regulators	Dec. 13, 1892
487,834	Griscom, W. W.	Batteries, secondary	Dec. 13, 1892
487,839	Johnson, H. T.	Batteries, galvanic	Dec. 13, 1892
487,846	Lean, G. R. and Burleigh, C. B.	Lights, sockets and keys	Dec. 13, 1892
487,852	McCullough, A. H.	Telephones, systems, multiple switch-board	Dec. 13, 1892
487,853	McQuarrie, A. H.	Telephones, systems, multiple switch-board, test.	Dec. 13, 1892
487,854	McQuarrie, J. L.	do	Dec. 13, 1892
487,881	Newman, N.	Lighting, systems	Dec. 13, 1892
487,890	Pautbonier, C.	Lights, incandescent	Dec. 13, 1892
487,904	Krulus, Z.	Railway signals, track instruments	Dec. 13, 1892
487,936	Prentiss, H. S.	Telegraphy, automatic	Dec. 13, 1892
487,981	Buckingham, C. L.	Telegraphy, printing	Dec. 13, 1892
487,982	Buckingham, C. L.	do	Dec. 13, 1892
487,983	Buckingham, C. L.	do	Dec. 13, 1892
487,984	Buckingham, C. L.	do	Dec. 13, 1892
487,985	Buckingham, C. L.	do	Dec. 13, 1892
487,986	Buckingham, C. L.	do	Dec. 13, 1892
488,002	Garton, W. R.	Telegraphy, lightning arresters	Dec. 13, 1892
488,012	Kilbourn, L. M. and Van Etten, S.	Igniting devices, automatic	Dec. 13, 1892
488,013	Kjorstad, O.	Medical and surgical, body-wear	Dec. 13, 1892
488,016	Lamme, B. G.	Magneto-electric	Dec. 13, 1892
488,022	Mason, D.	Railways, systems, overhead, trolley	Dec. 13, 1892
488,023	Mason, D.	do	Dec. 13, 1892
488,027	Purcell, J. J.	Conductors, underground	Dec. 13, 1892
488,033	Scribner, C. E. and Warner, E. P.	Telephones, systems	Dec. 13, 1892
488,034	Scribner, C. E.	Anti-induction devices	Dec. 13, 1892
488,035	Scribner, C. E.	Telephones, systems, multiple switch-board, test.	Dec. 13, 1892
488,036	Scribner, C. E.	do	Dec. 13, 1892
488,037	Scribner, C. E.	do	Dec. 13, 1892
488,038	Scribner, C. E.	do	Dec. 13, 1892
488,041	Storey, I. E.	Motors	Dec. 13, 1892
488,046	Wirt, C.	Insulators	Dec. 13, 1892
488,053	Bell, O. A.	Telephones, systems, multiple switch-board, test.	Dec. 13, 1892
488,064	Chase, H. C.	Separators	Dec. 13, 1892
488,107	Ball, J. O.	Meters	Dec. 13, 1892
488,121	Houghton, E. J. and White, W.	Regulators	Dec. 13, 1892
488,123	Keating, H. S.	Cut-outs, thermal	Dec. 13, 1892
488,132	Reinhardt, J. H.	Railways, tramway switches	Dec. 13, 1892
488,138	Young, J. V.	Railway signals, sectional rail	Dec. 13, 1892
488,139	Applegate, E. W.	Lights, incandescent	Dec. 13, 1892
488,141	Cuttriss, C.	Conductors	Dec. 13, 1892
488,179	Bentley, E. M.	Railways, systems, overhead, trolley	Dec. 20, 1892
488,193	Hart, W. H.	Conductors, underground	Dec. 20, 1892
488,205	Hutchinson, J.	Lights, sockets and keys	Dec. 20, 1892
488,222	Rockwell, F. C.	do	Dec. 20, 1892
488,225	Schafer, E.	Railway signals, block systems	Dec. 20, 1892

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488,233	Washburn, G. A	Batteries, secondary	Dec. 20, 1892
488,256	Stevens, N. P	Lights, filaments and carbons	Dec. 20, 1892
488,261	Bogue, C. J	Regulators	Dec. 20, 1892
488,285	Patenall, T. H	Railway signals	Dec. 20, 1892
488,298	Welsb, F. P	Drop light spring drum	Dec. 20, 1892
488,299	Willms, C	Inductoriums, induction coils	Dec. 20, 1892
488,305	Bradley, C. S	Motors, alternating	Dec. 20, 1892
488,306	Bradley, C. S	do	Dec. 20, 1892
488,307	Bradley, C. S	Lighting, systems	Dec. 20, 1892
488,329	De Puydt, A	Lights, arc, gravity feed, gear-clutch	Dec. 20, 1892
488,351	Dion, L. O	Railways, systems, closed conduit	Dec. 20, 1892
488,367	Rabbidge, P	Telephones, electric	Dec. 20, 1892
488,385	Chase, E. B	Telephones, details	Dec. 20, 1892
488,388	Davis, A. G	Bells	Dec. 20, 1892
488,414	Zunner, J. H. G	Electric automatic dampers	Dec. 20, 1892
488,415	Ayres, R. B	Indicators, station	Dec. 20, 1892
488,424	Butler, L. W	Elevators, controllers	Dec. 20, 1892
488,441	Lothrop, G. H	Railways, automatic	Dec. 20, 1892
488,462	Weaver, W	Railways, car starters	Dec. 20, 1892
488,466	Burton, G. D. and Angell, E. E	Heating, metal working	Dec. 20, 1892
488,467	Burton, G. D. and Angell, E. E	do	Dec. 20, 1892
488,468	Burton, G. D. and Angell, E. E	do	Dec. 20, 1892
488,469	Burton, G. D. and Angell, E. E	do	Dec. 20, 1892
488,482	Pain, R. W	Music, electric actions	Dec. 20, 1892
488,502	Jennings, C. C	Telephones, systems	Dec. 20, 1892
488,522	Lyon, I. W	Telephones, switch-boards	Dec. 20, 1892
488,536	Bates, J. H	Annunciators, drop	Dec. 27, 1892
488,550	Field, S. D	Telephones, relays and repeaters	Dec. 27, 1892
488,567	Lyman, A. B	Annunciators, drop systems	Dec. 27, 1892
488,579	Scribner, C. E	Telegraphy, fire	Dec. 27, 1892
488,585	Thomson, E	Lights, arc, gravity feed, clutch	Dec. 27, 1892
488,611	Krogb, F. C. C	Telegraphy, circuit closers, thermal	Dec. 27, 1892
488,615	Schlosser, F. P	Railway signals, cab, sectional rail	Dec. 27, 1892
488,635	Prentiss, F. H	Lights, incandescent	Dec. 27, 1892
488,636	Prentiss, F. H	do	Dec. 27, 1892
488,645	Ashley, E. L. and Camp, W. H	Telegraphy, circuit closers, thermal	Dec. 27, 1892
488,654	Harris, F	Railway signals	Dec. 27, 1892
488,666	Sloper, T. B	Telephones, systems	Dec. 27, 1892
488,687	Bundy, W. L	Time checks	Dec. 27, 1892
488,696	Odell, H. M	Lights, arc, gravity feed, clutch	Dec. 27, 1892
488,706	Browne, W. L	Railways, systems, overhead, trolley	Dec. 27, 1892
488,708	Craney, T	Electrolysis, aqueous bath	Dec. 27, 1892
488,726	Wladimiroff, N	Batteries, secondary	Dec. 27, 1892
488,738	Mansfield, F	Railways, systems, closed conduit	Dec. 27, 1892
488,740	Pattison, C. E	Cut-outs, mechanical	Dec. 27, 1892
488,811	Hirt, L. J	Railways, systems, overhead, trolley	Dec. 27, 1892
488,835	Ries, E. E	Lights, sockets and keys	Dec. 27, 1892
488,871	Coffin, C. L	Heating, soldering	Dec. 27, 1892
488,872	Coffin, C. L	do	Dec. 27, 1892
488,878	Noran, W	Lights, incandescent, special features	Dec. 27, 1892
488,889	Guthberlet, E. T. and Isard, W. R	Igniting devices, manual	Dec. 27, 1892
488,899	Painter, G. E	Cut-outs, electro-magnetic	Dec. 27, 1892
488,928	Van Depoele, C. J	Systems of distribution	Dec. 27, 1892
488,929	Van Depoele, C. J	Railways, systems, overhead, trolleys	Dec. 27, 1892
488,930	Van Depoele, C. J	Electric locomotives	Dec. 27, 1892
488,940	Jones, F. W	Telegraphy, repeaters	Dec. 27, 1892
488,946	O'Neill, J. A	Lights, incandescent, special features	Dec. 27, 1892
488,951	Ries, E. E	Lights, sockets and keys	Dec. 27, 1892
488,978	Ashley, R	Magneto-electric	Jan. 3, 1893
488,993	Francis, J. C	Telephones, switches	Jan. 3, 1893
489,000	Groswith, H. and Ashley, R	Magneto-electric	Jan. 3, 1893
489,005	Hiss, N	Indicators	Jan. 3, 1893
489,046	Thomson, E	Lights, arc, positive feed, gear-clutch	Jan. 3, 1893
489,052	Watts, J. E	Dampers, automatic pressure motors	Jan. 3, 1893
489,065	Wood, J. J	Magneto-electric	Jan. 3, 1893
489,070	Daniels, C. F	do	Jan. 3, 1893
489,071	Daniels, C. F	do	Jan. 3, 1893
489,075	Erkins, C. R. H	Telegraphy, circuit closers, thermal	Jan. 3, 1893
489,097	Scranton, G. H. and Spillman, L	Railways, conductor supports and insulators	Jan. 3, 1893
489,098	Scribner, C. E	Telephones, systems	Jan. 3, 1893
489,099	Scribner, C. E	do	Jan. 3, 1893
489,100	Scribner, C. E	do	Jan. 3, 1893
489,101	Seymour, C. E	Mills, amalgamator, mercury	Jan. 3, 1893
489,113	Zaremba, E	Railway signals	Jan. 3, 1893
489,114	Arnold, R. C	Heating, metal working	Jan. 3, 1893
489,115	Arnold, R. C	Batteries, secondary	Jan. 3, 1893
489,150	Keil, A	Safety lamps and lanterns	Jan. 3, 1893

No.	NAME.	CLASS.	DATE.
489,158	Foster, G. C. H.	Lights, sockets and keys	Jan. 3, 1893
489,161	Illig, H.	Meters	Jan. 3, 1893
489,172	Wilcox, C. W.	Drop lights, friction and clutch	Jan. 3, 1893
489,179	Brodie, W. H.	Store service, switches	Jan. 3, 1893
489,207	Starkweather, M. S.	Railways, track cleaners, wheel fenders	Jan. 3, 1893
489,212	Bartlett, J.	Telethermometers	Jan. 3, 1893
489,216	Calhoun, H.	Mills, electric amalgamator	Jan. 3, 1893
489,234	Reutlinger, J.	Railways, systems, overhead, trolley	Jan. 3, 1893
489,237	Schweigler, W. J.	Annunciators, drop system	Jan. 3, 1893
489,249	Görge, J. H. F.	Galvanometers	Jan. 3, 1893
489,259	Maxim, H. T. and Price, J. M.	Thermometers	Jan. 3, 1893
489,266	Rabbidge, P.	Telegraphy, circuit closers	Jan. 3, 1893
489,277	Varley, R., jr.	Electro-magnets	Jan. 3, 1893
489,302	Golden, W. T. and Atkinson, L. B.	Magneto-electric	Jan. 3, 1893
489,185	Goodrich, C. F.	do	Jan. 3, 1893
489,186	Harris, G. W.	Batteries, secondary	Jan. 3, 1893
489,312	La France, E.	Telegraphy, circuit closers, thermal	Jan. 3, 1893
489,315	Michel, A. E.	Batteries, secondary	Jan. 3, 1893
489,330	Rutter, A. L.	Railways, systems, telpher	Jan. 3, 1893
489,364	Bossert, W. F.	Cut-outs, thermal	Jan. 3, 1893
489,422	Tatro, C. P.	Railways, systems, closed conduit	Jan. 3, 1893
489,423	Tirrell, J. P.	Time alarms	Jan. 3, 1893
489,424	Tirrell, J. P.	Valve controllers	Jan. 3, 1893
489,428	Biaggi, A.	Time lamp lighters	Jan. 3, 1893
489,435	Hotchkiss, Z. P.	Telegraphy, automatic	Jan. 3, 1893
22,101	Weston, E. (Design)	Measuring instruments	Jan. 3, 1893
489,481	Jenkins, E. H.	Railways, systems, overhead, trolley	Jan. 10, 1893
489,505	Silvey, W. L.	Pulleys and shafting	Jan. 10, 1893
489,519	Anthony, W. O.	Coin-controlled apparatus, phonographs	Jan. 10, 1893
489,522	Cahall, W. C.	Batteries, galvanic	Jan. 10, 1893
489,526	Doubleday, H. M.	Lighting, systems	Jan. 10, 1893
489,551	Waite, C. N.	Electro-chemistry apparatus	Jan. 10, 1893
489,553	Baehr, G.	Cut-outs, mechanical, oscillating snap	Jan. 10, 1893
489,559	Foot, G. L.	Batteries, galvanic	Jan. 10, 1893
489,563	Kimball, D. E.	Railways, systems, closed conduit	Jan. 10, 1893
489,570	Scribner, C. E.	Telephones, systems	Jan. 10, 1893
489,571	Scribner, C. E. and Patterson, W. R.	Telephones, systems, multiple switch-board, test.	Jan. 10, 1893
489,573	Von Siemens, G. W.	Railways, systems, closed conduit	Jan. 10, 1893
489,597	Badt, F. B.	Railways, systems, converter	Jan. 10, 1893
489,598	Badt, F. B.	Lighting, systems	Jan. 10, 1893
489,603	Davidson, J. L.	Telephones, details	Jan. 10, 1893
489,616	Sloss, A. M.	Igniting devices, manual	Jan. 10, 1893
489,625	Desant, W. F. Z.	Railway signals	Jan. 10, 1893
489,629	Desant, W. F. Z.	do	Jan. 10, 1893
489,653	Lane, T. W.	Igniting devices, manual	Jan. 10, 1893
489,658	McCarthy, L.	Insulators	Jan. 10, 1893
489,663	Goold, F. D'A.	Cut-outs, mechanical, oscillating snap	Jan. 10, 1893
489,674	Goold, F. D'A.	do	Jan. 10, 1893
489,677	Greenwood, J.	Electrolysis, aqueous bath, chemicals	Jan. 10, 1893
489,682	Metzger, A.	Lights, sockets and keys	Jan. 10, 1893
489,687	Ott, J. F. and Kennelly, A. E.	Motors, hand operating device	Jan. 10, 1893
489,709	Hering, C.	Transmission of power	Jan. 10, 1893
489,736	Geary, J. E.	Annunciators, step-by-step	Jan. 10, 1893
489,739	Henry, L. and Dalysson, L. N.	Lights, sockets and keys	Jan. 10, 1893
489,764	Sheldon, J. B., Murnane, D. J., and Van Beck, G. L.	Railways, systems, closed conduit	Jan. 10, 1893
489,815	Hume, C. S.	Drop light, spring drum	Jan. 10, 1893
489,832	Reud, W. R.	Batteries, galvanic	Jan. 10, 1893
489,835	Stark, C. A.	Railways, systems, closed conduit	Jan. 10, 1893
489,861	Bennett, G. H.	Lights, incandescent, special features	Jan. 10, 1893
489,883	Tripp, T.	Electric locomotives	Jan. 10, 1893
489,902	Hull, W. S.	Alarms, burglar	Jan. 10, 1893
489,933	Davis, J. H.	Batteries, galvanic	Jan. 17, 1893
489,944	Goetz, A. C.	Railways, tramway	Jan. 17, 1893
489,972	Miller, A. C.	Railways, car brakes	Jan. 17, 1893
489,983	Potter, W. B.	Cut-outs, thermal	Jan. 17, 1893
489,990	Scribner, C. E.	Telephones, electric	Jan. 17, 1893
489,991	Seamans, I. M.	Dampers, automatic expansion	Jan. 17, 1893
490,011	Dibble, F. J.	Meters	Jan. 17, 1893
490,012	Dibble, F. J.	Telemeters	Jan. 17, 1893
490,013	Dibble, F. J.	do	Jan. 17, 1893
490,014	Dibble, F. J.	do	Jan. 17, 1893
490,028	Love, J. C.	Railways, systems, overhead, trolley	Jan. 17, 1893
490,034	Morford, T. E.	Conductors	Jan. 17, 1893
490,064	Brown, F. H.	Telegraphy, circuits and systems	Jan. 17, 1893
490,081	McLaughlin, J. F.	Magneto-electric	Jan. 17, 1893

No.	NAME.	CLASS.	DATE.
490,082	McLaughlin, J. F.	Electric heaters	Jan. 17, 1893
490,161	Nadeau, J. A.	Alarms, burglar	Jan. 17, 1893
490,178	Thomson, E.	Cut-outs, mechanical	Jan. 17, 1893
490,183	Billberg, C. O. C.	Magneto-electric	Jan. 17, 1893
490,211	Nielsen, H. P.	Telegraphy, fire, engine-house, apparatus	Jan. 17, 1893
490,248	Harris, T.	Railways, systems, closed conduit	Jan. 17, 1893
490,279	Frölich, O.	Meters	Jan. 24, 1893
490,280	Hansen, J. W.	Motors	Jan. 24, 1893
490,292	Leavy, M.	Cut-outs, thermal	Jan. 24, 1893
490,297	Miner, H. A.	Railways, systems, overhead	Jan. 24, 1893
490,302	McCarthy, L.	Insulators	Jan. 24, 1893
490,306	Parker, R. and Sutton, B. F.	Railways, systems, closed conduit	Jan. 24, 1893
490,307	Philipsborn, A. and Schiemann, M.	Electric locomotives	Jan. 24, 1893
490,326	Trout, F. B.	Alarms, burglar	Jan. 24, 1893
490,327	Van Hoevenbergh, H.	Lighting, systems	Jan. 24, 1893
490,353	James, W. G.	Alarms, burglar	Jan. 24, 1893
490,363	Rohrer, A. L.	Cut-outs, mechanical	Jan. 24, 1893
490,376	Thomson, E.	Magneto-electric	Jan. 24, 1893
490,449	Lundell, R.	Motors	Jan. 24, 1893
490,460	Wachtel, C.	Magneto-electric	Jan. 24, 1893
490,477	Hutchinson, J.	Cut-outs, thermal	Jan. 24, 1893
490,479	Kruschke, R. C.	Alarms, burglar	Jan. 24, 1893
490,560	Hauty, A. J.	Insulators	Jan. 24, 1893
490,597	Hayden, R.	Railways, systems, closed conduit	Jan. 24, 1893
490,605	Vetter, A. F.	Lights, sockets and keys	Jan. 24, 1893
490,626	Green, I. L.	Railway signals, cab, sectional rail	Jan. 24, 1893
490,630	Ransome, E. L.	Conductors, underground	Jan. 24, 1893
490,663	La Burt, J.	Railway signals, cab, sectional rail	Jan. 31, 1893
490,678	Price, W. A.	Medical and surgical, electrodes	Jan. 31, 1893
490,679	Price, W. A.	do	Jan. 31, 1893
490,684	Schilling, G. W. and Haslam, J. G.	Alarms	Jan. 31, 1893
490,699	Weston, E.	Meters	Jan. 31, 1893
490,700	Weston, E.	Galvanometers	Jan. 31, 1893
490,725	Smith, F. G.	Alarms	Jan. 31, 1893
490,746	Gibbs, J. S.	Cut-outs, mechanical, rotary	Jan. 31, 1893
490,753	Osburn, H. G.	Batteries, secondary	Jan. 31, 1893
490,755	Russell, G. L.	Connectors	Jan. 31, 1893
490,760	Weston, E.	Galvanometers	Jan. 31, 1893
490,761	Wilson, A. J. and Salmon, W. W.	Railway signals, block systems	Jan. 31, 1893
490,762	Bentley, E. M.	Cut-outs, mechanical	Jan. 31, 1893
490,809	Lundell, R.	Magneto-electric	Jan. 31, 1893
490,810	Lundell, R.	do	Jan. 31, 1893
490,870	Carr, W. H.	Alarms, burglar	Jan. 31, 1893
490,891	Ahearn, T.	Medical and surgical, body-wear	Jan. 31, 1893
490,903	Gartland, F. X.	Lights, incandescent	Jan. 31, 1893
490,917	Morris, E. P.	Cut-outs, thermal	Jan. 31, 1893
490,948	Cummings, J. W.	Medical and surgical, body-wear	Jan. 31, 1893
490,953	Edison, T. A.	Batteries, galvanic	Jan. 31, 1893
490,959	Gay, A.	Magneto-electric, connecting devices	Jan. 31, 1893
490,975	Mitchell, E. W.	Railways, systems, closed conduit	Jan. 31, 1893
490,992	Snyden, J. and Sandy, W. J. L.	Lights, arc, gravity feed, clutch	Jan. 31, 1893
491,014	Goetz, J. J. and Smith, J. A.	Railways, systems, overhead, trolley	Jan. 31, 1893
491,095	Freeman, W. E.	Lights, arc, gravity feed, clutch	Feb. 7, 1893
491,106	Hicks, T. H.	Magneto-electric	Feb. 7, 1893
491,109	Holman, S. W.	Conductors, anti-inductive	Feb. 7, 1893
491,124	McLaughlin, J.	Lights, arc, special features	Feb. 7, 1893
491,132	Perkins, I. C.	Railways, systems, closed conduit	Feb. 7, 1893
491,133	Porter, M. D.	Telegraphy, printing, multiple wheel	Feb. 7, 1893
491,163	Field, S. D.	Telegraphy, dynamo	Feb. 7, 1893
491,208	Edmunds, W. H.	Insulators	Feb. 7, 1893
491,210	Harris, S.	Railways, systems, overhead, trolley	Feb. 7, 1893
491,250	Scribner, C. E.	Telephones, systems, multiple switch-board, test.	Feb. 7, 1893
491,251	Scribner, C. E.	Lights, arc, gravity feed, clutch	Feb. 7, 1893
491,252	Seely, J. A.	Telephones, systems, multiple switch-board, test.	Feb. 7, 1893
491,268	Elliott, E. R.	Lights, sockets and keys	Feb. 7, 1893
491,275	Tyler, H. L.	Telephones, electric	Feb. 7, 1893
491,294	Parrot, G. V. M. A. and Reignier, A. C.	Magneto-electric	Feb. 7, 1893
491,346	Gray, E.	Telegraphy, automatic	Feb. 7, 1893
491,347	Gray, E.	do	Feb. 7, 1893
491,361	Kochs, B. and A.	Railways, systems, overhead, trolley	Feb. 7, 1893
491,362	Lane, A. R.	Insulators	Feb. 7, 1893
491,387	Thaler, L.	Railway signals, sectional rail	Feb. 7, 1893
491,426	Holecombe, J. H. L.	Lighting, systems	Feb. 7, 1893
491,437	Mitchell, W.	Heating, metal working	Feb. 7, 1893
491,438	Mitchell, W.	do	Feb. 7, 1893

No.	NAME.	CLASS.	DATE.
491,457	Willyoung, E. G.	Galvanometers	Feb. 7, 1893
491,465	Bradley, C. S.	Transmission of power	Feb. 7, 1893
491,483	Immisch, M.	Motors	Feb. 7, 1893
491,484	Jenkins, S. B.	Heaters	Feb. 7, 1893
491,490	Morford, T. E.	Magneto-electric	Feb. 7, 1893
491,491	Morford, T. E.	Electro-magnets	Feb. 7, 1893
11,303	Morford, T. E.	Conductors	Feb. 7, 1893
11,306	Scribner, C. E.	Telephones, systems, multiple switch-board, test.	Feb. 7, 1893
491,531	Currier, J. B.	Telephones, calls	Feb. 14, 1893
491,532	Currier, J. B. and Rice, D. H.	do	Feb. 14, 1893
491,548	Goold, F. D'A.	Lights, arc, gravity feed, gear-clutch	Feb. 14, 1893
491,553	Hall, E. J.	Telephones, systems, divided central	Feb. 14, 1893
491,560	Hummel, G.	Meters	Feb. 14, 1893
491,561	Hutchinson, J.	Lights, sockets and keys	Feb. 14, 1893
491,567	Kolben, E.	Magneto-electric	Feb. 14, 1893
491,568	Kolben, E.	do	Feb. 14, 1893
491,580	Milligan, C. J.	Alarms	Feb. 14, 1893
491,595	Roberts, R. S.	Telegraphy, automatic	Feb. 14, 1893
491,596	Robb, J. T.	Lighting, ceiling block	Feb. 14, 1893
491,603	Scribner, C. E.	Lights, arc, gravity feed, clutch	Feb. 14, 1893
491,604	Scribner, C. E.	do	Feb. 14, 1893
491,605	Scribner, C. E.	do	Feb. 14, 1893
491,609	Stewart, J. B.	Railway signals, sectional rail	Feb. 14, 1893
491,666	Short, S. H.	Electric locomotives	Feb. 14, 1893
491,667	Short, S. H.	do	Feb. 14, 1893
491,682	Halvorson, C. A. B.	Lights, incandescent, special features	Feb. 14, 1893
491,688	Scribner, C. E.	Telephones, systems, multiple switch-board, divided central.	Feb. 14, 1893
491,691	Thomas, G. L.	Railways, systems, circuits, series	Feb. 14, 1893
491,695	Wood, J. J.	Magneto-electric	Feb. 14, 1893
491,707	Jefferson, C. W.	Conductors, underground	Feb. 14, 1893
491,708	Jefferson, C. W.	Magneto-electric	Feb. 14, 1893
491,713	Main, W.	Lights, incandescent, special features	Feb. 14, 1893
491,726	Macleod, W. A.	Magneto-electric	Feb. 14, 1893
491,729	McCarthy, L.	Insulators	Feb. 14, 1893
491,758	Von Orth, L.	Telegraphy, fire	Feb. 14, 1893
491,811	Patin, O.	Magneto-electric	Feb. 14, 1893
491,829	Williams, J. A.	Regulators	Feb. 14, 1893
491,837	Crabtree, L. T.	Railway signals	Feb. 14, 1893
491,857	Prae, F. B.	Electric locomotives	Feb. 14, 1893
491,874	Clarke, F. H.	Railway signals, cab, sectional rail	Feb. 14, 1893
491,878	Edgerton, N. H.	Batteries, secondary	Feb. 14, 1893
491,890	Johnston, A. L.	Insulators	Feb. 14, 1893
491,893	Kinsman, J. H.	Telephones, calls, step-by-step	Feb. 14, 1893
491,915	Akester, W. H.	Lights, arc, gravity feed, gear-clutch	Feb. 14, 1893
491,916	Akester, W. H.	do	Feb. 14, 1893
491,970	Weston, A. W.	Motors	Feb. 14, 1893
491,978	Bolte, F. H.	Time checks	Feb. 21, 1893
491,982	Capek, J. V.	Motors	Feb. 21, 1893
491,988	Dickinson, A.	Railways, systems, overhead, trolley	Feb. 21, 1893
491,990	Dorman, G. E.	Magneto-electric	Feb. 21, 1893
491,992	Edison, T. A.	Cut-outs, thermal	Feb. 21, 1893
492,003	Goold, F. D'A.	Lights, arc, special features	Feb. 21, 1893
492,011	Haight, H. J.	Annunciators, step-by-step	Feb. 21, 1893
492,019	Humans, W.	Telephones, switches	Feb. 21, 1893
492,036	Lozier, R. T.	Regulators	Feb. 21, 1893
492,106	Rae, F. B.	Railways, systems, conduit	Feb. 21, 1893
492,110	Sack, J.	Telephones, calls, step-by-step	Feb. 21, 1893
492,124	Ward, B. B.	Lights, arc, gravity feed, gear-clutch	Feb. 21, 1893
492,150	Edison, T. A.	Lights, filaments and carbons	Feb. 21, 1893
492,151	Freeman, W. E.	Magneto-electric	Feb. 21, 1893
492,160	Herdman, F. E.	Elevators	Feb. 21, 1893
492,176	Williams, J. A.	Magneto-electric	Feb. 21, 1893
492,200	Harper, H.	Lights, arc, gravity feed	Feb. 21, 1893
492,201	Harper, H.	do	Feb. 21, 1893
492,215	Larkins, S. O.	Lights, incandescent, special features	Feb. 21, 1893
492,219	Lyman, A. B.	Telegraphy, lightning arresters	Feb. 21, 1893
492,236	Rodgers, W. H.	Alarms	Feb. 21, 1893
492,244	Smith, A. W.	Magneto-electric	Feb. 21, 1893
492,245	Standiford, J. F.	Photography, retouching	Feb. 21, 1893
492,265	Bryan, F. W.	Railways, systems, conduit	Feb. 21, 1893
492,291	Houghton, E. J. and White, W.	Magneto-electric	Feb. 21, 1893
492,301	Keckelely, W. H.	Conductors	Feb. 21, 1893
492,309	Reenstierna, G. L.	Bells	Feb. 21, 1893
492,312	Thomson, J.	Lights, arc, positive feed, gear-clutch	Feb. 21, 1893
492,330	Kamsler, J.	Alarms, burglar	Feb. 21, 1893

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492,353	Gott, C. P.	Measuring instruments, passenger register	Feb. 21, 1893
492,355	Hicks, T. H.	Magneto-electric	Feb. 21, 1893
492,394	Eichberg, W. N.	Insulators	Feb. 28, 1893
492,398	Heiser, A.	Railways, systems, closed conduit	Feb. 28, 1893
492,402	Kinsman, F. E.	Railway signals, cab, sectional rail	Feb. 28, 1893
492,403	Kinsman, F. E.	do	Feb. 28, 1893
492,422	McLaughlin, J. F.	Batteries, secondary	Feb. 28, 1893
492,456	Berry, F. H.	Motors, hand operating device	Feb. 28, 1893
492,457	Blackwell, F. O.	Railway signals, sectional rail	Feb. 28, 1893
492,467	Haynes, C. M.	Telephones, relays and repeaters	Feb. 28, 1893
492,471	Pickernell, F. A.	Telegraphy, circuits and systems	Feb. 28, 1893
492,478	Stuarts, C. F. A.	Alarms, burglar	Feb. 28, 1893
492,480	Bradley, C. S.	Inductariums, transformers, rotary	Feb. 28, 1893
492,482	Hall, E. F. and Pickernell, F. A.	Telephones, systems	Feb. 28, 1893
492,483	Hall, E. F. and Pickernell, F. A.	do	Feb. 28, 1893
492,484	McQuarrie, J. L.	Telephones, systems, multiple switch-board, test.	Feb. 28, 1893
492,492	Fletcher, W. C.	Car brakes	Feb. 28, 1893
492,497	Kenyon, W. H.	Railway signals, block	Feb. 28, 1893
492,512	Hum, E. K.	Lightning rods	Feb. 28, 1893
492,519	Hard, J. R.	Annunciators, drop	Feb. 28, 1893
492,524	Beers, F. H.	Motors	Feb. 28, 1893
492,544	Scott, C. F.	Telegraphy, lightning arresters	Feb. 28, 1893
492,545	Trafford, W.	Annunciators, time	Feb. 28, 1893
492,547	Wurts, A.	Cut-outs, thermal	Feb. 28, 1893
492,548	Wurts, A.	Telegraphy, lightning arresters	Feb. 28, 1893
492,549	Wurts, A.	do	Feb. 28, 1893
492,627	Kintner, C. J.	Alarms	Feb. 28, 1893
492,633	Rollins, R. W.	Lighting, systems, automatic regulation	Feb. 28, 1893
492,645	Wait, H. St. C.	Railway signals	Feb. 28, 1893
492,646	Walker, W. J.	Alarms, burglar	Feb. 28, 1893
492,649	Wheatley, T. W.	Cut-outs, thermal	Feb. 28, 1893
492,650	Wiemann, W. P.	Lights, arc, gravity feed, gear-clutch	Feb. 28, 1893
492,659	Cattori, M.	Railways, systems, circuit, series	Feb. 28, 1893
492,681	Hoare, G.	Magneto-electric	Feb. 28, 1893
492,689	Lattig, J. W.	Telegraphy, relays and sounders	Feb. 28, 1893
492,694	McMorrow, J., jr.	Annunciators, time	Feb. 28, 1893
492,713	Coffin, C. L.	Heating, metal working	Feb. 28, 1893
492,737	Bates, J. H.	Railways, systems, conduit	Feb. 28, 1893
492,757	Carpenter, C. E.	Rheostats	Feb. 28, 1893
492,758	Carpenter, C. E.	do	Feb. 28, 1893
492,773	Ayres, A. D.	Car brakes	Mar. 7, 1893
492,786	Coyle, A. M.	Regulators	Mar. 7, 1893
492,789	Edison, T. A.	Telephones, electric	Mar. 7, 1893
492,807	Irisb, D. and Williams, J. G.	Electro-magnetic	Mar. 7, 1893
492,808	Jenkins, N.	Lights, incandescent, special features	Mar. 7, 1893
492,809	Von der Kammer, J.	Lights, incandescent	Mar. 7, 1893
492,811	Kissinger, W. S.	Connectors	Mar. 7, 1893
492,815	McFadden, G. K.	Lights, arc, gravity feed, clutch	Mar. 7, 1893
492,837	Robinson, E. W.	Railway signals, cab, sectional rail	Mar. 7, 1893
492,847	Stevens, T. E.	Lights, incandescent, special features	Mar. 7, 1893
492,850	Strowger, A. B. and W. S.	Telegraphy, circuit closers	Mar. 7, 1893
492,866	Hurd, C. S.	Telegraphy, fire, alarms and extinguishers	Mar. 7, 1893
492,881	Winton, H. D.	Railways, systems, overhead	Mar. 7, 1893
492,883	Bloomer, C. T.	Telephones, electric	Mar. 7, 1893
492,888	Hunter, R. M.	Magneto-electric	Mar. 7, 1893
492,913	Chambers, J. C.	Igniting devices, manual	Mar. 7, 1893
493,000	Van Duzer, L. S.	Steering and propulsion	Mar. 7, 1893
493,009	Bedell, C. H.	Cut-outs, electro-magnetic	Mar. 7, 1893
493,025	Hassler, R. H.	Magneto-electric	Mar. 7, 1893
493,067	Carter, F. S.	Annunciators, time	Mar. 7, 1893
493,089	Henry, J. C.	Electric locomotives	Mar. 7, 1893
493,104	Morley, W. M.	Magneto-electric	Mar. 7, 1893
493,109	McLaughlin, J. F.	Lights, sockets and keys	Mar. 7, 1893
493,125	Seiler, P.	Railway signals, block	Mar. 7, 1893
493,212	Head, F. E.	Railways, conductor supports and insulators	Mar. 7, 1893
493,243	Bossert, W. F.	Cut-outs, mechanical, oscillating snap	Mar. 14, 1893
493,245	Brown, G. McC	Telephones, details	Mar. 14, 1893
493,253	Decrow, W. E.	Recorders	Mar. 14, 1893
493,313	Thomson, E.	Magneto-electric	Mar. 14, 1893
493,314	Thomson, E.	Telegraphy, lightning arresters	Mar. 14, 1893
493,328	Bonebrake, L. P.	Cut-outs, thermal	Mar. 14, 1893
493,337	Parshall, H. F.	Magneto-electric	Mar. 14, 1893
493,349	Bassett, N. C.	do	Mar. 14, 1893
493,359	Hunter, R. M.	Lights, arc, special features	Mar. 14, 1893
493,360	Hunter, R. M.	Lights, arc, gravity feed, clutch	Mar. 14, 1893
493,361	Immisch, M.	Motors	Mar. 14, 1893

No.	NAME.	CLASS.	DATE.
493,369	Stromberg, A	Cut-outs, thermal	Mar. 14, 1893
493,375	Dunn, G. S	Magneto-electric	Mar. 14, 1893
493,380	Hammarström, E. F	Cut-outs, thermal	Mar. 14, 1893
493,411	Robb, J. T	Lights, incandescent, special features	Mar. 14, 1893
493,425	Edison, T. A	Electric locomotives	Mar. 14, 1893
493,431	Keller, J	Dental instruments	Mar. 14, 1893
493,434	Locke, F. M	Insulators	Mar. 14, 1893
493,439	Weston, A. W	Magneto-electric	Mar. 14, 1893
493,447	Rollins, G. A	do	Mar. 14, 1893
493,485	Coyte, A. M	Motors, hand operating devices	Mar. 14, 1893
493,601	Shepard, T. W	Telegraphy, circuit closers, thermal	Mar. 14, 1893
493,602	Shepard, T. W	do	Mar. 14, 1893
493,609	Ball, H. B. and Metzger, A	Lights, sockets and keys	Mar. 14, 1893
493,618	Davis, J. and Huntington, R. M	Railways, systems, conduit	Mar. 14, 1893
493,620	Freir, S. P	Telegraphy, quadruplex	Mar. 14, 1893
493,623	Harris, T	Railways, systems, closed conduit	Mar. 14, 1893
493,629	Lemp, H. and Wightmann, M. J	Cut-outs, thermal	Mar. 21, 1893
493,672	Badt, F. B	Batteries, secondary	Mar. 21, 1893
493,673	Baines, E	Telegraphy, circuits and systems	Mar. 21, 1893
493,678	Bradford, J. and Williams, J. P	Railway signals, cab, sectional rail	Mar. 21, 1893
493,679	Brown, H. P	Magneto-electric	Mar. 21, 1893
493,695	Petrow, H. P	Railways, systems, conduit	Mar. 21, 1893
493,704	Goodridge, W. M	Telephones, systems	Mar. 21, 1893
493,713	Hathaway, M. H. and Kelleher, J	Railways, conductor supports and insulators	Mar. 21, 1893
493,716	Hazelton, E	Railways, systems, closed conduit	Mar. 21, 1893
493,718	Hellerbrandt, S	Magneto-electric	Mar. 21, 1893
493,723	Horton, W. P., jr	Dental instruments	Mar. 21, 1893
493,739	Thomson, E	Lights, arc, positive feed	Mar. 21, 1893
493,745	Bain, F	Magneto-electric	Mar. 21, 1893
493,754	Crockett, C. H. and Allen, C. C	Lighting ceiling blocks	Mar. 21, 1893
493,755	Crockett, C. H. and Allen, C. C	Lights, incandescent, special features	Mar. 21, 1893
493,789	Saitz, J. F	Railways, systems, overhead, trolley	Mar. 21, 1893
493,842	Rushmore, S. W	Lighting, systems	Mar. 21, 1893
493,868	Hutchinson, J	Lights, incandescent, special features	Mar. 21, 1893
493,883	Ballet, E	do	Mar. 21, 1893
493,884	Barry, C. E	Lighting, ceiling blocks	Mar. 21, 1893
493,907	Bloomer, C. T	Telephones, switches	Mar. 21, 1893
493,914	Reymond, A. Du Bois	Railways, systems, converter	Mar. 21, 1893
493,918	Evans, P	Railways, systems	Mar. 21, 1893
493,926	Henneberg, H. O	Telegraphy, lightning arresters	Mar. 21, 1893
493,935	Miller, H. V. and A. C	Railway signals, cab, sectional rail	Mar. 21, 1893
493,942	Philipsborn, A	Electric locomotives	Mar. 21, 1893
493,943	Philipsborn, A	do	Mar. 21, 1893
493,948	Von Siemens, G. W	Railways, systems, closed conduit	Mar. 21, 1893
493,969	Brown, C	Electric locomotives	Mar. 21, 1893
493,997	Harteluis, C. E	Medical and surgical, exercising apparatus	Mar. 21, 1893
494,007	La Burt, J	Railway signals, cab, sectional rail	Mar. 21, 1893
494,042	Thomas, W. M	Magneto-electric	Mar. 21, 1893
494,053	Birkin, W. A. G	Motors, reciprocating	Mar. 21, 1893
494,077	Peters, R. D	Railway signals, block systems	Mar. 21, 1893
494,091	Thomas, W. M	Igniting devices, manual	Mar. 21, 1893
494,098	Folger, C. H	Bells	Mar. 21, 1893
494,111	Miller, S. W., A. C., and H. V	Railway signals, sectional rail	Mar. 21, 1893
494,149	De Lodyguine, A	Lights, filaments and carbons	Mar. 28, 1893
494,150	De Lodyguine, A	do	Mar. 28, 1893
494,151	De Lodyguine, A	do	Mar. 28, 1893
494,185	Wright, J. E	Telegraphy, printing, multiple wheel	Mar. 28, 1893
494,186	Wurts, A	Telegraphy, lightning arresters	Mar. 28, 1893
494,199	Hall, T. G	Batteries, thermal	Mar. 28, 1893
494,225	Remerfelt, G	Meters	Mar. 28, 1893
494,239	Barnett, H. T	Lighting, systems	Mar. 28, 1893
494,278	Manger, F. W. and Huebel, O. H	Bells	Mar. 28, 1893
494,279	Martin, M	Telegraphy, fire	Mar. 28, 1893
494,286	Bartlett, J. B. L	Conductors, lightning-rods	Mar. 28, 1893
494,337	King, J	Telegraphy, circuit closers	Mar. 28, 1893
494,344	Neal, J. H	Electric locomotives	Mar. 28, 1893
494,345	Pearce, F	Telegraphy, transmitters	Mar. 28, 1893
494,359	Williams, R. E	Medical and surgical, combs and brushes	Mar. 28, 1893
494,385	Pickernell, F. A. and Dunbar, F. W	Telephones, systems, multiple switch-boards, divided central	Mar. 28, 1893
494,477	Henry, J. C	Railways, systems, closed circuits	Mar. 28, 1893
494,479	Henry, J. C	Electric locomotives	Mar. 28, 1893
494,489	Ramsey, J., jr. and Harden, E. W	Railway signals	Mar. 28, 1893
494,499	Turbayne, W. A	Lights, arc, special features	Mar. 28, 1893
494,513	Stanley, W. jr	Meters	Mar. 28, 1893
494,520	Boyd, B. Y	Medical and surgical	Mar. 28, 1893
494,525	Fontaine, E	Railway signals, block systems	Mar. 28, 1893

No.	NAME.	CLASS.	DATE.
494,531	Moore, McF. D	Lights, incandescent	Mar. 28, 1893
494,562	Gray, E	Telegraphy, automatic	Apr. 4, 1893
494,565	Hill, W. S	Motors, hand operating devices	Apr. 4, 1893
494,585	Mitchell, W	Furnaces, electric	Apr. 4, 1893
494,586	Mitchell, W	do	Apr. 4, 1893
494,596	Ring, J. H	Telegraphy, fire	Apr. 4, 1893
494,608	Van Denburgh, N. and Loveridge, F. H	Magneto-electric connecting devices	Apr. 4, 1893
494,610	Webb, G. W	Cut-outs, mechanical	Apr. 4, 1893
494,629	Dunn, D. W	Magneto-electric	Apr. 4, 1893
494,657	Thomson, M. E	Meters	Apr. 4, 1893
494,667	Clamer, F. J	Galvanizing	Apr. 4, 1893
494,668	Clamer, F. J	do	Apr. 4, 1893
494,705	Hunter, R. M	Electric locomotives	Apr. 4, 1893
494,710	Carver, J. W. and C. E	Towers, telegraph poles	Apr. 4, 1893
494,721	Martyn, E	Railways, systems, overhead, trolley	Apr. 4, 1893
494,739	Eckstrom, A	Magneto-electric	Apr. 4, 1893
494,750	Ball, H. P	Cut-outs, mechanical, oscillating snap	Apr. 4, 1893
494,751	Bassett, N. C	Car brakes	Apr. 4, 1893
494,762	Rogers, J. B	Annunciators, step-by-step	Apr. 4, 1893
494,765	Tyler, H. L	Alarms	Apr. 4, 1893
494,778	Flora, E. E	Coin-controlled apparatus, phonographs	Apr. 4, 1893
494,781	Hill, W. S	Motors, hand operating devices	Apr. 4, 1893
494,786	Mehren, J. F	Telegraphy, fire	Apr. 4, 1893
494,787	Mehren, J. F	do	Apr. 4, 1893
494,807	Flora, E. E	Coin-controlled apparatus, phonographs	Apr. 4, 1893
494,827	Weston, E	Batteries, galvanic	Apr. 4, 1893
494,828	Weston, E	Galvanometers	Apr. 4, 1893
494,829	Weston, E	Meters	Apr. 4, 1893
494,830	Weston, E	Galvanometers	Apr. 4, 1893
494,832	Hubleler, H	Clocks, electric	Apr. 4, 1893
494,836	Baxendale, A. S	Magneto-electric	Apr. 4, 1893
494,849	Elison, C. P	Batteries, secondary	Apr. 4, 1893
494,852	Fitch, D. H	Batteries, galvanic	Apr. 4, 1893
494,856	Gooden, W. T. and Atkinson, L. B	Magneto-electric	Apr. 4, 1893
494,871	Langhein, E. L	Railways, systems, overhead, trolley	Apr. 4, 1893
494,923	Hull, W. S	Alarms, burglar	Apr. 4, 1893
494,924	Hull, W. S	Iron structures, jails	Apr. 4, 1893
494,958	Jordan, C. M	Surgery, ear	Apr. 4, 1893
494,961	Kocpoel, A	Galvanometers	Apr. 4, 1893
494,964	Northrup, E. F	do	Apr. 4, 1893
494,966	Page, H. S	Time alarms	Apr. 4, 1893
494,978	Crocker, F. B. and Wheeler, S. S	Motors	Apr. 4, 1893
494,995	Adair, B. and Klewer, C. H	Cut-outs, electro-magnetic	Apr. 4, 1893
495,026	Demnick, G. W	Electro-magnets	Apr. 11, 1893
495,030	Fahrney, W. H	Telegraphy, circuits and systems	Apr. 11, 1893
495,035	Heath, F	Railways, systems, overhead, trolley	Apr. 11, 1893
495,038	Hill, W. S	Cut-outs, thermal	Apr. 11, 1893
495,046	Knoche, A	Motors, reciprocating	Apr. 11, 1893
495,047	Knowles, C. V	Indicators	Apr. 11, 1893
495,058	Priest, E. D	Magneto-electric	Apr. 11, 1893
495,071	Thomson, E	Applications, tools and machines	Apr. 11, 1893
495,077	Waterhouse, A. G	Lights, arc, gravity feed, clutch	Apr. 11, 1893
495,086	Gengenbach, E	Galvanometers	Apr. 11, 1893
495,087	Hall, E. J	Telephones, systems	Apr. 11, 1893
495,107	Coleman, G. D	Batteries, secondary	Apr. 11, 1893
495,125	Stupakoff, S. H	Electro-magnets	Apr. 11, 1893
495,127	Wilder, E. R	Annunciators, step-by-step	Apr. 11, 1893
495,136	Koch, K	Magneto-electric	Apr. 11, 1893
495,138	McLeod, J. N	Magneto-electric, hand machines	Apr. 11, 1893
495,139	McLeod, J. N	do	Apr. 11, 1893
495,148	Collins, R. G	Steam engines, recording indicators	Apr. 11, 1893
495,175	Wood, E. J	Dynamometers	Apr. 11, 1893
495,176	Archer, F. M	Batteries, galvanic	Apr. 11, 1893
495,177	Archer, F. M	do	Apr. 11, 1893
495,179	Carty, J. J	Telephones, systems	Apr. 11, 1893
495,180	Carty, J. J. and Pickernell, F. A	Telephones, details	Apr. 11, 1893
495,193	Berne, A. W	Railway signals, cab, sectional rail	Apr. 11, 1893
495,212	Wiswell, J. F	Electrolysis, aqueous bath	Apr. 11, 1893
495,225	Lintner, G. A	Galvanometers	Apr. 11, 1893
495,229	Rice, E. W. jr	Inductoriuns, transformers, rotary	Apr. 11, 1893
495,240	Benjamin, G. H	Lights, incandescent	Apr. 11, 1893
495,281	Tremper, F. E	Air and gas engines, explosive	Apr. 11, 1893
495,287	Adams, T. B	Time alarms	Apr. 11, 1893
495,306	Coleman, C. J	Batteries, galvanic	Apr. 11, 1893
495,318	Faben, T. H	Lamp and gas fittings, shade supports	Apr. 11, 1893
495,383	Van Depoele, C. J., deceased	Railways, systems, overhead, trolleys	Apr. 11, 1893
495,393	Coffin, C. L	Heating, metal working	Apr. 11, 1893

No.	NAME.	CLASS.	DATE.
495,394	Coffin, C. L.	Heating, metal working	Apr. 11, 1893
495,443	Van Depoele, C. J., deceased	Railways, systems, overhead, trolley	Apr. 11, 1893
495,456	De Voe, W. R.	Railways, systems, conduit	Apr. 11, 1893
495,461	Hunter, R. M.	Lights, arc, special features	Apr. 11, 1893
495,463	Lane, G. M.	Lights, filaments and carbons	Apr. 11, 1893
495,467	Green, H.	Lights, incandescent	Apr. 11, 1893
495,472	Buxtorf, E.	Knitting and netting, feeding	Apr. 18, 1893
495,513	Pierce, F. J.	Lights, incandescent, special features	Apr. 18, 1893
495,538	Willson, T. L.	Magneto-electric	Apr. 18, 1893
495,547	Fuller, R.	Motors	Apr. 18, 1893
495,552	Hills, L.	Insulators	Apr. 18, 1893
495,561	Paterson, B. S.	Magneto-electric	Apr. 18, 1893
495,562	Perret, F. A.	do	Apr. 18, 1893
495,564	Porter, H. B.	Bells	Apr. 18, 1893
495,582	Emme, M.	Batteries, galvanic	Apr. 18, 1893
495,587	Holt, C. F.	Measuring instruments, ships' logs	Apr. 18, 1893
495,600	Rennerfelt, G. O.	Electrolysis, fused bath	Apr. 18, 1893
495,601	Schmidt, F. T.	Lights, arc, gravity feed, gear-clutch	Apr. 18, 1893
495,608	Crosby, G. C.	Mills, magnetic separators	Apr. 18, 1893
495,615	Rae, F. B.	Railways, systems, overhead	Apr. 18, 1893
495,620	Applegate, E. W.	Lights, incandescent	Apr. 18, 1893
495,626	Curtis, J. D.	Wire-working, joining	Apr. 18, 1893
495,637	Pfeiger, J.	Chemistry, ores	Apr. 18, 1893
495,638	Rowley, L. B.	Batteries, secondary	Apr. 18, 1893
495,643	Turbayne, W. A.	Lights, arc, gravity feed, clutch	Apr. 18, 1893
495,649	Adams, C. F.	Lights, arc, positive feed, gear-clutch	Apr. 18, 1893
495,674	Alteneck, F. von Hefner	Railway signals, track instruments	Apr. 18, 1893
495,676	Hudson, T.	Lights, incandescent, special features	Apr. 18, 1893
495,692	Clemminshaw, C. G. and Bradt, W. H.	Railways, systems, overhead, trolley	Apr. 18, 1893
495,695	Duncan, W.	do	Apr. 18, 1893
495,714	Thomson, E.	Telegraphy, lightning arresters	Apr. 18, 1893
495,744	Levi, J.	Telegraphy, circuits and systems	Apr. 18, 1893
495,770	Bartlett, A.	Time alarms	Apr. 18, 1893
495,772	Bleauvalet, E. E. and L. C.	Lights, arc, gravity feed, gear-clutch	Apr. 18, 1893
495,782	Carnes, R. F.	Medical and surgical, electric soles	Apr. 18, 1893
495,835	Redfield, C. L.	Printing, matrix making	Apr. 18, 1893
495,853	Thomson, E.	Telegraphy, lightning arresters	Apr. 18, 1893
495,861	Webb, G. F.	Medical and surgical, body-wear	Apr. 18, 1893
495,913	Savager, J. S., jr.	Railway signals, block	Apr. 18, 1893
495,929	Carter, W. and Willey, C. E.	Igniting devices, manual	Apr. 18, 1893
495,932	Edmunds, H., jr.	Lighting, systems	Apr. 18, 1893
495,936	Gardner, F.	Artesian and oil wells, cleaning	Apr. 18, 1893
495,940	Koedding, W.	Magneto-electric	Apr. 18, 1893
495,941	Koedding, W.	do	Apr. 18, 1893
495,951	Whitney, L. C.	Lamps and gas fittings, harps and hangers	Apr. 18, 1893
495,996	Patton, W. P.	Railways, systems, closed conduit	Apr. 25, 1893
496,019	Thomson, E.	Heating, metal working	Apr. 25, 1893
496,020	Thomson, E.	Systems of distribution	Apr. 25, 1893
496,041	Corrington, M.	Railway signals, block systems	Apr. 25, 1893
496,050	Manderfield, G. J.	Knitting and netting, stopping	Apr. 25, 1893
496,067	Skelton, F. C.	Alarms	Apr. 25, 1893
496,076	Wetzer, H.	Telephony, calls, reed	Apr. 25, 1893
496,081	Wright, J. F.	Insulators	Apr. 25, 1893
496,103	Smith, L. T.	Igniting devices	Apr. 25, 1893
496,126	La Roche, F. A.	Batteries, secondary	Apr. 25, 1893
496,134	Prentiss, H. S.	Clocks, electric	Apr. 25, 1893
496,135	Prentiss, H. S.	do	Apr. 25, 1893
496,137	Ricke, G. H. E.	Telephones, mechanical	Apr. 25, 1893
496,176	Wegner, G. and Gührs, P.	Electrolysis, aqueous bath	Apr. 25, 1893
496,191	Edison, T. A.	Phonographs	Apr. 25, 1893
496,192	Elfering, J. H.	Annunciators, step-by-step	Apr. 25, 1893
496,207	Porter, M. D.	Annunciators	Apr. 25, 1893
496,208	Procunier, H. E.	Annealing and tempering	Apr. 25, 1893
496,212	Stanley, W., jr.	Systems of distribution	Apr. 25, 1893
496,224	Holman, S. W.	Telephones, magnetic	Apr. 25, 1893
496,228	Koller, H.	Batteries, galvanic	Apr. 25, 1893
496,244	Barrett, F. A.	Medical and surgical, body-wear	Apr. 25, 1893
496,258	Hain, H. C.	Time alarms	Apr. 25, 1893
496,280	Pritchett, W. W.	Railways, systems, overhead, trolley	Apr. 25, 1893
496,307	Heinze, J. O., jr.	Magneto-electric	Apr. 25, 1893
496,308	Heinze, J. O., jr.	Cut-outs, thermal	Apr. 25, 1893
496,309	Heinze, J. O., jr.	Galvanometers	Apr. 25, 1893
496,312	Hunter, R. M.	do	Apr. 25, 1893
496,324	Pursell, H. D. and Price, E. F.	Coin-controlled apparatus, exhibitors	Apr. 25, 1893
496,329	Van Depoele, C. J., deceased	Railways, systems, telpher	Apr. 25, 1893
496,330	Van Depoele, C. J., deceased	Electric locomotives	Apr. 25, 1893
496,331	Van Depoele, C. J., deceased	Motors, reciprocating	Apr. 25, 1893

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496,366	Moore, D. McF. and Jacobs, C. M.	Lighting, systems	Apr. 25, 1893
496,371	Teague, F.	Meters	Apr. 25, 1893
496,381	Gray, A. C.	Telephones, switch-boards	Apr. 25, 1893
496,382	Moore, C. E.	Motors, hand operating devices	Apr. 25, 1893
496,386	Akester, W. H.	Lights, arc, gravity feed, clutch	Apr. 25, 1893
496,387	Akester, W. H.	Lights, arc, gravity feed, gear-clutch	Apr. 25, 1893
496,402	Eisenman, R.	Music, electric actions	May 2, 1893
496,409	Hansen, F.	Lights, arc, gravity feed, gear-clutch	May 2, 1893
496,427	Morgan, W. H.	Cranes and derricks, traveling, double track	May 2, 1893
496,429	Morgan, W. H.	Cranes and derricks, pivoted jib, rotary, portable	May 2, 1893
496,432	Morgan, W. H.	Cranes and derricks, traveling, double track	May 2, 1893
496,433	Morgan, W. H.	Cranes and derricks, non-pivoted jib, rotating	May 2, 1893
496,449	Scribner, C. E. and Warner, E. P.	Magneto-electric	May 2, 1893
496,455	Thomson, E. and Rice, E. W., jr.	Lighting, systems, automatic regulation	May 2, 1893
496,456	Thomson, E. and Rice, E. W., jr.	Magneto-electric	May 2, 1893
496,473	Daves, W. and Peddle, W. H.	Railway signals	May 2, 1893
496,474	Dillon, J.	Lights, incandescent, special features	May 2, 1893
496,500	Weston, E.	Galvanometers	May 2, 1893
496,501	Weston, E.	do	May 2, 1893
496,513	Field, S. D.	Telephones, systems	May 2, 1893
496,514	Fritsche, W.	Magneto-electric	May 2, 1893
496,517	Hensel, R. T. E.	Batteries, secondary	May 2, 1893
496,519	Kruuscheid, P.	Fire alarms	May 2, 1893
496,522	Mason, D.	Motors, hand operating devices	May 2, 1893
496,533	Perry, N. W.	Railways, systems, circuits, multiple arc	May 2, 1893
496,549	Wirsching, A. H.	Telegraphy, printing, multiple wheel	May 2, 1893
496,550	Boynton, E. M.	Electric locomotives	May 2, 1893
496,551	Bradford, E. W.	Mail-bag catchers	May 2, 1893
496,567	Hoffmann, C. H.	Pulleys and shafting, belt tighteners	May 2, 1893
496,591	Burton, G. D. and Angell, E. E.	Metal working	May 2, 1893
496,592	Burton, G. D.	do	May 2, 1893
496,593	Burton, G. D.	do	May 2, 1893
496,594	Burton, G. D.	do	May 3, 1893
496,597	Chatlin, S. C.	Electrolysis, aqueous bath, apparatus	May 2, 1893
496,602	Field, S. D.	Telephones, magnetic	May 2, 1893
496,611	Hutchins, A. E.	Lighting, systems	May 2, 1893
496,618	Quinn, D. J. and Hoffmann, P. W.	Igniting devices, manual	May 2, 1893
496,631	Adams, T. E.	Railways, systems, overhead, trolley	May 2, 1893
496,648	Gregory, F. L.	Electro-magnets	May 2, 1893
496,652	Hemingray, R. G. and Gill, J. C.	Insulators	May 2, 1893
496,658	Irving, F. K.	Batteries, galvanic	May 2, 1893
496,659	Kerr, R. C. and Hardmann, P.	Telegraphy, circuit closers, thermal	May 2, 1893
496,678	Armen, A. H.	Galvanometers	May 2, 1893
496,688	Houghton, S. C.	Measuring instruments, fare registers	May 2, 1893
496,960	Kolbe, H. F.	Bells	May 2, 1893
496,701	Sanders, J. F. and S. J.	Lights, filaments and carbons	May 2, 1893
496,702	Sanders, J. F. and S. J.	Lights, arc and incandescent	May 2, 1893
496,710	Thomson, E.	Clutches, multiple disk	May 2, 1893
496,724	Dillman, W. C. and Leib, G. A.	Telegraphy, fire, automatic	May 2, 1893
496,728	Edmonson, J. and Oulton, J.	Meters	May 2, 1893
496,743	De Meritens, A. L.	Batteries, galvanic	May 2, 1893
496,746	Oulton, J. and Edmonson, J.	Meters	May 2, 1893
496,775	Burton, G. D. and Angell, E. E.	Metal working	May 2, 1893
496,786	Lattig, J. W.	Railway signals, sectional rail	May 2, 1893
496,787	Lattig, J. W.	do	May 2, 1893
496,791	Packard, W. D.	Magneto-electric	May 2, 1893
496,792	Peeples, G.	Lights, incandescent, special features	May 2, 1893
496,801	Stevenson, E. W.	Lighting, systems, test	May 2, 1893
496,807	Wright, A.	Cut-outs, mechanical, oscillating snap	May 2, 1893
496,808	Wright, A.	do	May 2, 1893
496,859	Clark, E. A.	Telephones, systems, divided central	May 9, 1893
496,863	Cauey, T.	Electrolysis, aqueous bath, chemicals	May 9, 1893
496,864	Cauey, T.	do	May 9, 1893
496,865	Cauey, T.	do	May 9, 1893
496,869	Egan, C. E.	Fire alarms	May 9, 1893
496,871	Erickson, O.	Meters	May 9, 1893
496,878	Holtzer, C. W.	Batteries, galvanic	May 9, 1893
496,882	Krueger, M.	Lights, arc, positive feed, gear-clutch	May 9, 1893
496,890	Moxham, A. J.	Metal working	May 9, 1893
499,896	Prewitt, M. Q.	Railways, systems, conduit	May 9, 1893
496,901	Rohrer, A. L.	Lighting, systems	May 9, 1893
496,904	Scribner, C. E.	Telephones, systems	May 9, 1893
496,905	Scribner, C. E.	do	May 9, 1893
496,906	Scribner, C. E.	do	May 9, 1893
496,907	Scribner, C. E.	do	May 9, 1893
496,918	Thomson, E.	Lighting, systems	May 9, 1893

No.	NAME.	CLASS.	DATE.
496,945	Morgan, W. H.	Motors	May 9, 1893
496,959	Severy, M. L.	Solar heaters	May 9, 1893
497,001	Crompton, R. E. B.	Magneto-electric	May 9, 1893
497,024	Hunter, R. M.	Railways, systems, circuits, multiple arc	May 9, 1893
497,025	Hunter, R. M.	Railways, systems, overhead	May 9, 1893
497,038	Waring, J.	Lights, incandescent	May 9, 1893
497,062	Sturtevant, F.	Alarms, burglar	May 9, 1893
497,104	Turnbayne, W. A.	Lights, arc, special features	May 9, 1893
497,110	Winand, P. A. N. and Billberg, C. O. C.	Motors, alternating	May 9, 1893
497,113	Biathy, O. T.	do	May 9, 1893
497,117	Buchanan, C. G.	Mills, magnetic separators	May 9, 1893
497,120	Chinnoek, C. E.	Telegraphy, lighting arresters	May 9, 1893
497,123	Hassan, M. W.	Magneto-electric	May 9, 1893
497,129	Reams, A. R.	Electrolysis, aqueous bath, apparatus	May 9, 1893
497,144	Teal, L.	Motors, hand operating devices	May 9, 1893
497,197	Nellis, A. J.	Dressing stone	May 9, 1893
497,200	Nortney, J. and Shefold, F.	Lights, arc, special features	May 9, 1893
497,226	Waite, H. E.	Friction generators	May 9, 1893
497,251	Peebles, G.	Lights, incandescent, special features	May 9, 1893
497,263	Carstarphen, W. P., jr.	Igniting devices, manual	May 9, 1893
497,281	Martin, M.	Telegraphy, automatic	May 9, 1893
497,293	Hamlin, H. A.	Railways, conductor supports and insulators	May 9, 1893
497,310	Cullen, W. A.	Lighting, systems	May 16, 1893
497,336	Patterson, W. R.	Conductors	May 16, 1893
497,337	Patterson, W. R.	Railways, systems, overhead	May 16, 1893
497,356	Strong, G. S.	Electric locomotives	May 16, 1893
497,361	Thomson, E.	Magneto-electric	May 16, 1893
497,366	Wright, P.	Rheostats	May 16, 1893
497,377	Just, P. C.	Railways, systems, conduit	May 16, 1893
497,394	Westinghouse, G., jr.	do	May 16, 1893
497,397	Wurts, A. and Scott, C. F.	Telegraphy, lighting arresters	May 16, 1893
497,404	Carstarphen, W. P., jr.	Igniting devices	May 16, 1893
497,408	Jordan, W. H.	Railway signals, sectional rail	May 16, 1893
497,411	McGregory, F. S.	Telegraphy, circuit closers	May 16, 1893
497,430	Leland, H. W.	Alarms, burglar	May 16, 1893
497,436	Westinghouse, G., jr.	Railways, systems, closed conduit	May 16, 1893
497,438	Wray, J. C.	Lights, arc, gravity feed, clutch	May 16, 1893
497,439	Wylie, A. J.	Insulators	May 16, 1893
497,448	Hoyt, A. H.	Galvanometers	May 16, 1893
497,449	Hoyt, A. H.	do	May 16, 1893
497,450	Hunter, R. M.	Lights, arc, gravity feed, clutch	May 16, 1893
497,468	Freeman, W. K.	Magneto-electric	May 16, 1893
497,482	Weston, E.	Galvanometers	May 16, 1893
497,489	Buchanan, J. P.	Railway signals, sectional rail	May 16, 1893
497,491	Cuno, C.	Lighting, systems	May 16, 1893
497,494	Einstein, J.	Lights, arc, positive feed, gear-clutch	May 16, 1893
497,495	Hassan, M. W.	Railways, systems, overhead	May 16, 1893
497,504	Stuart, J. E. and James, W. S.	Magneto-electric	May 16, 1893
497,507	Wurts, A.	Telegraphy, lighting arresters	May 16, 1893
497,508	Wurts, A.	do	May 16, 1893
497,509	Wurts, A.	do	May 16, 1893
497,515	Brady, T. H.	Insulators	May 16, 1893
497,521	Hoyt, A. H.	Galvanometers	May 16, 1893
497,522	Hoyt, A. H.	do	May 16, 1893
497,529	Fröhlich, O.	do	May 16, 1893
497,535	Cummings, J. F.	Conductors, underground	May 16, 1893
497,536	Cummings, J. F.	do	May 16, 1893
497,539	Fröhlich, O.	Galvanometers	May 16, 1893
497,540	Di Giovanni, G. G.	Lights, incandescent, special features	May 16, 1893
497,552	Sachs, J.	Lighting, systems, test	May 16, 1893
497,553	Thompson, F. H.	Lights, arc, special features	May 16, 1893
497,563	Whittier, C. R.	Motors	May 16, 1893
497,555	Martin, A. J.	Railways, systems, closed conduit	May 16, 1893
497,601	Powers, J. J. and Van Buren, R.	Conductors, underground	May 16, 1893
497,649	Freeman, J. P.	Telephones, magnetic	May 16, 1893
497,680	Nordmann, P.	Lighting, systems	May 16, 1893
497,732	Stupakoff, S. H.	Cut-outs, thermal	May 16, 1893
497,735	Meissner, W.	Lighting, systems	May 16, 1893
497,756	Woltmann, E. and Triggs, H. A.	Cut-outs, mechanical, rotary	May 16, 1893
497,771	Cook, S. M.	Electric heaters	May 23, 1893
497,790	Jenkins, S. B.	do	May 23, 1893
497,791	Jenkins, S. B.	do	May 23, 1893
497,792	Jenkins, S. B.	do	May 23, 1893
497,793	Jenkins, S. B.	do	May 23, 1893
497,794	Jenkins, S. B.	do	May 23, 1893
497,795	Jenkins, S. B.	do	May 23, 1893
497,800	Krogh, E. C. C.	Telegraphy, circuit closers, thermal	May 23, 1893

No.	NAME.	CLASS.	DATE.
497,808	Moxham, A. J.	Heating, metal working	May 23, 1893
497,822	Roger, H. C.	Medical and surgical, body-wear	May 23, 1893
497,836	Sykes, W. R. and O'Donnell, J. P.	Railway signals, block system	May 23, 1893
497,838	Thomson, E.	Telegraphy, lightning arresters	May 23, 1893
497,844	Walls, M. C.	Cut-outs, thermal	May 23, 1893
497,849	Wirt, H. C.	Lights, sockets and keys	May 23, 1893
497,852	Wright, P.	Conductors, underground	May 23, 1893
497,869	Dryardin, P. J. R.	Batteries, secondary	May 23, 1893
497,878	McLaughlin, J. F.	Magneto-electric	May 23, 1893
497,888	McLaughlin, J. F.	do	May 23, 1893
497,898	Scribner, C. E.	Lights, arc, special features	May 23, 1893
497,907	Cooke, P.	Coin controlled apparatus, telephones	May 23, 1893
497,923	Martin, M.	Telegraphy, circuit closers, thermal	May 23, 1893
497,942	Bell, J. M.	Telegraphy, fire	May 23, 1893
497,955	Frei, G. A.	Lights, incandescent, special features	May 23, 1893
497,956	Frei, G. A.	Cut-outs, thermal	May 23, 1893
497,957	Frei, G. A.	Lights, incandescent	May 23, 1893
497,963	Johnson, A. L.	Nut and bolt locks, side	May 23, 1893
498,021	Pattee, H. H.	Meters	May 23, 1893
498,022	Pattee, H. H.	do	May 23, 1893
498,046	Allen, E. H.	Railways, systems, overhead, trolley	May 23, 1893
498,078	O'Neill, H. G.	Heaters	May 23, 1893
498,135	Moffett, G. F.	Railways, systems, conduit	May 23, 1893
498,141	Siebold, A. C.	Lights, filaments and carbons	May 23, 1893
498,153	Bradley, J. L.	Telegraphy, circuit closers, thermal	May 23, 1893
498,160	Dyer, F. L. and L. W.	Motors	May 23, 1893
498,169	Hicatzman, A. H.	Railways, systems, conduit	May 23, 1893
498,189	Reynolds, J. L.	Railways, systems, closed conduit	May 23, 1893
11,341	Goldkind, I.	(Reis.) Lights, sockets and keys	May 23, 1893
498,236	Clark, E. A.	Telephones, systems, automatic	May 30, 1893
498,243	Davis, A. G.	Telephones, details	May 30, 1893
498,269	Hills, L.	Lights, arc, positive feed, gear-clutch	May 30, 1893
498,280	Mannel, M.	Station indicators	May 30, 1893
498,289	McCaskey, A. S.	Telegraphy, printing	May 30, 1893
498,290	McCaskey, A. S.	Railway signals, block system	May 30, 1893
498,291	McCaskey, A. S.	Telephones, systems, automatic	May 30, 1893
498,309	Scattergood, C. F.	Telephones, electric	May 30, 1893
498,312	Scribner, C. E.	Lighting, systems	May 30, 1893
498,327	Thomson, E.	Magneto-electric	May 30, 1893
498,355	Lord, C. A.	Railways, systems, overhead, trolley	May 30, 1893
498,372	Ward, B. B.	Alarms	May 30, 1893
498,374	Ball, H. P.	Lights, sockets and keys	May 30, 1893
498,387	Goold, F. D'A.	Lights, arc, non feeding	May 30, 1893
498,403	O'Shaughnessy, P. F.	Railways, systems, trolleys	May 30, 1893
498,407	Rich, R. H.	Connectors	May 30, 1893
498,422	Burnley, W.	Batteries, galvanic	May 30, 1893
498,435	Hunter, R. M.	Railways, systems, overhead, trolley	May 30, 1893
498,448	Sachs, J.	Telegraphy, fire	May 30, 1893
498,462	Dennison, J. F.	Motors	May 30, 1893
498,468	Fowler, W. M.	Time alarms	May 30, 1893
498,492	Sangster, J.	Igniting devices, automatic	May 30, 1893
498,519	Lewis, A. D. and Witherell, S.	Printing, stencil making pens	May 30, 1893
498,529	Baillard, E. V.	Telegraphy, printing, wheel	May 30, 1893
498,537	Dressler, C. E.	Inductariums, transformers, rotary	May 30, 1893
498,538	Dressler, C. E.	Magneto-electric	May 30, 1893
498,539	Duggan, F. A.	Ceiling blocks	May 30, 1893
498,550	Holtum, A.	Telegraphy, circuit closers	May 30, 1893
498,558	Lee, T.	Conveyers	May 30, 1893
498,560	Mashinter, W. P.	Cut-outs, thermal	May 30, 1893
498,566	Nordmann, P.	Lights, arc, gravity feed, clutch	May 30, 1893
498,570	Renchan, J. J.	Street light hangers	May 30, 1893
498,573	Riegger, C.	Music, electric actions	May 30, 1893
498,577	Schmidt, A.	Electric locomotives	May 30, 1893
498,585	Still, W. J.	Motors	May 30, 1893
498,603	Zipernowsky, C.	Railways, systems, converter	May 30, 1893
498,604	Alexander, H.	Lights, arc, gravity feed	May 30, 1893
498,605	Atwood, L.	Elevators	May 30, 1893
498,607	Ayres, R. R.	Station indicators	May 30, 1893
498,624	Clute, N. J.	Car brakes	May 30, 1893
498,674	Murray, D.	Telegraphy, printing	May 30, 1893
498,698	Ruggles, C. H.	Ceiling blocks	May 30, 1893
498,710	Gibson, C. S.	Time alarms	May 30, 1893
488,722	Nutall, R. D.	Railways, systems, overhead, trolley	May 30, 1893
498,723	Nutall, R. D.	do	May 30, 1893
498,735	Bassler, J. H.	Metal working	May 30, 1893
498,757	Attix, T. F.	Conductors	June 6, 1893
498,758	Ball, H. P. and Metzger, A.	Lights, sockets and keys	June 6, 1893

No.	NAME.	CLASS.	DATE.
498,763	Callender, R	Electro-magnets	June 6, 1893
498,768	Craney, T	Electrolysis, aqueous bath, chemicals	June 6, 1893
498,769	Craney, T	do	June 6, 1893
498,770	Craney, T	do	June 6, 1893
498,771	Craney, T	do	June 6, 1893
498,776	Englund, A. H.	Railways, conductor supports and insulators	June 6, 1893
498,799	Knowles, E. R.	Rheostats	June 6, 1893
498,808	McBerty, F. R.	Annunciators, drop	June 6, 1893
498,852	Kintner, C. J.	Railways, systems, closed conduit	June 6, 1893
498,864	Steele, J. W.	Railway signals, block systems	June 6, 1893
498,865	Stewart, J. B. and Watson, W. G.	Railway signals, sectional rail	June 6, 1893
498,869	Wilkerson, B. M.	Telephones, supports	June 6, 1893
498,871	Ayton, C. W.	Measuring instruments, telemetry	June 6, 1893
498,872	Ayton, C. W.	do	June 6, 1893
498,878	Colby, E. A.	Lights, incandescent	June 6, 1893
498,879	Colby, E. A.	do	June 6, 1893
498,880	Des Brisay, J.	Cut-outs, mechanical, oscillating snap	June 6, 1893
498,901	De Lodyguine, A.	Lights, incandescent	June 6, 1893
498,906	Smith, M. H.	Railways, systems, conduit	June 6, 1893
498,907	Stanley, W. and Tobey, W. B.	Telegraphy, condensers	June 6, 1893
498,911	Denison, S. P.	Telegraphy, automatic	June 6, 1893
498,915	Heinmann, S.	Lights, filaments and carbons	June 6, 1893
498,919	Pickering, B.	Telephones, magnetic	June 6, 1893
498,929	Colby, F. A.	Lights, incandescent	June 6, 1893
498,932	Griffiths, J. R.	Railways, systems, overhead, trolley	June 6, 1893
498,933	Griffiths, J. R.	do	June 6, 1893
498,969	Dillon, W. S. F.	Magneto-electric	June 6, 1893
498,973	Garnett, D. M. and J. H.	Printing, sheet stencils making	June 6, 1893
498,987	Ongley, C. E.	Telegraphy, fire	June 6, 1893
498,988	Ongley, C. E.	do	June 6, 1893
499,003	Banks, W. F.	Telegraphy, fire, non-interfering	June 6, 1893
499,040	Ries, E. E.	Metal working	June 6, 1893
499,090	Bodine, J.	Connectors	June 6, 1893
499,095	Chase, J.	Railways, systems, overhead, trolley	June 6, 1893
499,097	Colby, F. A.	Lights, incandescent	June 6, 1893
499,099	Dahl, O.	Motors	June 6, 1893
499,108	Harrison, E. M.	Telephones, electric	June 6, 1893
499,112	Henry, J. C.	Railways, systems, overhead	June 6, 1893
499,115	Hooper, G. W.	Railways, systems, overhead, trolley	June 6, 1893
499,125	Lattig, J. W.	Railway signals, sectional rail	June 6, 1893
499,126	Lattig, J. W.	do	June 6, 1893
499,143	Peterson, C.	Lighting, systems	June 6, 1893
499,167	Hunter, R. M.	Railways, systems, overhead	June 6, 1893
499,223	Garringer, C. R.	Balances, electric attachments	June 13, 1893
499,254	Sargent, H.	Connectors	June 13, 1893
499,261	Stromberg, A.	Alarms, burglar	June 13, 1893
499,270	Witner, H. K.	Railways, systems, overhead	June 13, 1893
499,275	Wirt, H. C.	Lighting, systems	June 13, 1893
499,277	Bassler, J. H.	Metal working	June 13, 1893
499,297	Lane, T. W. and Lee, C. E.	Igniting devices, manual	June 13, 1893
499,298	Lane, T. W. and Lee, C. E.	do	June 13, 1893
499,305	Moore, J. L.	Bells	June 13, 1893
499,313	Weston, E.	Galvanometers	June 13, 1893
499,321	Gear, S. W.	Railways, systems, overhead	June 13, 1893
499,350	Parshall, H. F.	Magneto-electric	June 13, 1893
499,363	McElroy, J. F.	Cut-outs, mechanical, rotary	June 13, 1893
499,374	De Voe, W. R.	Railways, systems, conduit	June 13, 1893
499,411	Armstrong, C. G.	Annunciators	June 13, 1893
499,425	Haskins, C. D.	Cut-outs, thermal	June 13, 1893
499,428	Hull, W. S.	Alarms, burglar	June 13, 1893
499,446	Stanley, W. and Kelley, J. F.	Magneto-electric	June 13, 1893
499,461	Hunter, R. M.	Railways, systems, overhead	June 13, 1893
499,470	Remhof, C.	Lamps and gas fittings, shade supports	June 13, 1893
499,473	Santer, G.	Head lights	June 13, 1893
499,485	Voorhees, G. T.	Cut-outs, thermal	June 13, 1893
499,518	Coffin, C. L.	Metal working	June 13, 1893
499,519	Coffin, C. L.	do	June 13, 1893
499,543	Henry, J. C.	Motors	June 13, 1893
499,544	Henry, J. C.	Regulators	June 13, 1893
499,596	Russell, W. H. and G. E.	Igniting devices, manual	June 13, 1893
499,610	Todd, J. T.	Telemetry	June 13, 1893
499,614	Voorhees, G. T.	Cut-outs, thermal	June 13, 1893
499,633	Henry, J. C.	Gearing	June 13, 1893
499,646	Russell, G. W.	Cut-outs, mechanical, oscillating snap	June 13, 1893
499,657	Coffin, C. L.	Metal working	June 13, 1893
499,662	Elliott, C. B.	Railways, conductor supports and insulators	June 13, 1893
499,664	Fay, T. J.	Cut-outs, thermal	June 13, 1893

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499,676	Hunter, R. M.	Lights, arc, gravity feed, clutch	June 13, 1893
499,681	Renstrom, N. A.	Medical and surgical, chairs and couches	June 13, 1893
499,693	Wilson, C. H.	Telephones, switch-boards	June 13, 1893
499,726	Fletcher, C. R.	Electrolysis, aqueous bath	June 20, 1893
499,737	Howland, R. S.	Clocks, electric	June 20, 1893
499,748	McClaren, A. E.	Telephones, systems, automatic	June 20, 1893
499,769	Whittingham, G. H.	Regulators	June 20, 1893
499,770	Willis, D. J.	Cut-outs, mechanical	June 20, 1893
499,780	Cornig, F. G.	Batteries, secondary	June 20, 1893
499,786	Goodman, E. J.	Surgery, movement cure	June 20, 1893
499,805	Stewart, J. B.	Railway signals, sectional rail	June 20, 1893
499,811	Wicks, P. J.	Telegraphy, quadruplex	June 20, 1893
499,848	Norton, F. O.	Batteries, secondary	June 20, 1893
499,852	Pfannkuche, G. and A.	Induction coils	June 20, 1893
499,864	Walker, W. J. and Bedford, A. L.	Alarms, burglar	June 20, 1893
499,871	Cochran, H.	Railways, systems, overhead, trolley	June 20, 1893
499,879	Edison, T. A.	Graphophones	June 20, 1893
499,908	Cathrein, J.	Lights, incandescent, special features	June 20, 1893
499,916	Frei, G. A.	Lights, incandescent	June 20, 1893
499,921	Hammond, F.	Knitting and netting, stopping	June 20, 1893
499,930	Persson, O. F.	Cut-outs, oscillating snap	June 20, 1893
499,943	Spillman, L.	Railways, conductor supports and insulators	June 20, 1893
499,964	Burton, G. D. and Angell, E. E.	Metal working	June 20, 1893
500,022	Moakler, J. W.	Electric locomotives	June 20, 1893
500,026	Morey, C. L.	Lighting, systems	June 20, 1893
500,027	Murdock, W. J.	Bells	June 20, 1893
500,041	Swartz, G. W.	Railway signals, block systems	June 20, 1893
500,053	Cary, E. E.	Lights, incandescent	June 20, 1893
500,065	Henry, J. C.	Railways, systems, closed conduit	June 20, 1893
500,066	Henry, J. C.	Electric locomotives	June 20, 1893
500,067	Henry, J. C.	do	June 20, 1893
500,068	Henry, J. C.	Railways, systems, converter	June 20, 1893
500,070	Henry, J. C.	Railways, systems, overhead, trolley	June 20, 1893
500,075	Nickerson, W. E.	Lights, incandescent	June 20, 1893
500,076	Nickerson, W. E.	do	June 20, 1893
500,077	Nickerson, W. E. and Cary, E. E.	do	June 20, 1893
500,078	Nickerson, W. E.	do	June 20, 1893
500,079	Nickerson, W. E.	do	June 20, 1893
500,104	Reed, C. J.	Railways, systems, closed conduit	June 20, 1893
500,110	Berrigan, W. H., jr.	Telegraphy, circuit closers	June 27, 1893
500,132	Hunter, R. M.	Motors	June 27, 1893
500,135	Jones, C. S.	do	June 27, 1893
500,144	Libbey, S. H.	Magneto-electric	June 27, 1893
500,172	Washburn, N. E.	Medical and surgical, electrodes	June 27, 1893
500,178	Wood, M. M.	Telegraphy, lightning arresters	June 27, 1893
500,192	Clewley, W. H.	Igniting devices, manual	June 27, 1893
500,199	George, J. S., jr.	Cut-outs, mechanical, rotary	June 27, 1893
500,200	George, J. S., jr.	do	June 27, 1893
500,201	George, J. S., jr.	do	June 27, 1893
500,226	Cuttriss, C.	Telegraphy, automatic	June 27, 1893
500,229	Egger, E.	Cut-outs, thermal	June 27, 1893
500,236	Kennelly, A. E.	Galvanometers	June 27, 1893
500,248	Young, S. A. and Alden, C.	Cut-outs, thermal	June 27, 1893
500,256	Smith, M. H.	Railways, systems, circuits	June 27, 1893
500,263	Duncan, W.	Railways, systems, overhead, trolley	June 27, 1893
500,264	Hoyt, A. H.	Galvanometers	June 27, 1893
500,272	Roehl, C. E., Mitchell, S. Z. and Wetmore, E. P.	Heaters	June 27, 1893
500,274	See, A. B. and Tyler, W. L.	Motors, hand operating	June 27, 1893
500,276	Stevens, F. M.	Electric locomotives	June 27, 1893
500,279	Criggal, J.	Lights, filaments and carbons	June 27, 1893
500,284	Hayden, M. M.	Batteries, galvanic	June 27, 1893
500,285	Kirnan, W. H.	Telegraphy, fire, variable signal, dial	June 27, 1893
500,288	McElroy, J. F.	Heaters	June 27, 1893
500,301	Stanley, W. and Kelley, J. F.	Magneto-electric	June 27, 1893
500,306	Warner, E. P.	Railways, systems, conduit	June 27, 1893
500,341	Mathiesen, W.	Lights, arc, gravity feed, gear-clutch	June 27, 1893
500,357	Tropp, B.	Igniting devices, manual	June 27, 1893
500,359	Utzinger, A.	Indicators	June 27, 1893
500,362	Weston, E.	Rheostats	June 27, 1893
500,375	Brodie, W. H.	Hoisting, elevated carrier	June 27, 1893
500,394	King, F. and Clarke, E.	Batteries, secondary	June 27, 1893
500,400	Lange, P.	Motors	June 27, 1893
500,403	Loveridge, F. H.	Magneto-electric	June 27, 1893
500,404	Luce, W. B.	Galvanometers	June 27, 1893
500,417	Noyes, R. N.	Lighting, systems	June 27, 1893
500,421	Pfluger, C. A.	Lights, arc, special features	June 27, 1893

No.	NAME.	CLASS.	DATE.
500,422	Pfluger, C. A	Lights, arc, gravity feed, clutch	June 27, 1893
500,423	Pfluger, C. A	Cut-outs, mechanical, oscillating spring	June 27, 1893
500,454	Wurdack, W	Telegraphy, lightning arresters	June 27, 1893
500,455	Wurts, A	do	June 27, 1893
500,456	Wurts, A	Cut-outs, electro-magnetic	June 27, 1893
500,481	Forbos, C. S	Telephones, electric	June 27, 1893
500,488	Gratiaa, S. D	Lights, incandescent, special features	June 27, 1893
500,506	McGregor, J. A. K	Railways, systems, closed conduit	June 27, 1893
500,520	Wetmore, E. P.	Heaters	June 27, 1893
500,539	Hodgkinson, T. C	Medical and surgical, electrodes	June 27, 1893
500,543	Scott, C. F	Galvanometers	June 27, 1893

APPENDIX No. XII.

PART III.

CONSISTING OF AN

ALPHABETICAL INDEX OF ALL PATENTS

RELATING TO

ELECTRICITY

Issued from July 1, 1892, to June 30, 1893, inclusive, giving names of Inventors,
numbers and dates of Patents, and the sub-class to which each belongs.

ALPHABETICAL INDEX

OF

PATENTS RELATING TO ELECTRICITY

FROM JULY 1, 1892, TO JUNE 30, 1893.

No.	NAME.	CLASS.	DATE.
487,702	Abbott, W. H.	Speed measures	Dec. 13, 1892
494,995	Adair, B. and Klewer, C. H.	Cut-outs, electro-magnets	Apr. 4, 1893
495,649	Adams, C. F.	Lights, arc, positive feed, gear-clutch	Apr. 18, 1893
495,287	Adams, T. B.	Time alarms	Apr. 11, 1893
496,631	Adams, T. E.	Railways, systems, overhead, trolley	May 2, 1893
482,031	Adams, C. A. and Thorp, T. J.	do	Sept. 6, 1892
481,291	Ahearn, T.	Heaters	Aug. 23, 1892
483,124	Ahearn, T.	do	Sept. 27, 1892
490,891	Ahearn, T.	Medical and surgical, body-wear	Jan. 31, 1893
491,915	Akester, W. H.	Lights, arc, gravity feed, gear-clutch	Feb. 14, 1893
491,916	Akester, W. H.	do	Feb. 14, 1893
496,386	Akester, W. H.	Lights, arc, gravity feed, clutch	Apr. 25, 1893
496,387	Akester, W. H.	do	Apr. 25, 1893
482,032	Alcock, A. W.	Galvanometers	Sept. 6, 1892
498,604	Alexander, H.	Lights, arc, gravity feed	May 30, 1893
483,316	Alden, S. T.	Cut-outs, mechanical, rotary	Sept. 27, 1892
493,974	Allam, E. P.	Lights, sockets and keys	Oct. 4, 1892
498,046	Allen, E. H.	Railways, systems, overhead, trolley	May 23, 1893
486,068	Allington, W. E.	Electric locomotives	Nov. 15, 1892
495,674	Alteneck, F. von Heiner	Railway signals, track instruments	Apr. 18, 1893
484,280	Anderson, A.	Railways, conductor supports and insulators	Oct. 11, 1892
11,266	Andrews, W. S. and Spenser, T. (Reis.)	Magneto-electric	Aug. 30, 1892
479,147	Andrus, D. P.	Medical and surgical, body-wear	July 19, 1892
489,519	Anthony, W. O.	Coin-controlled apparatus, phonographs	Jan. 10, 1893
487,360	Applegate, E. W.	Lights, incandescent	Dec. 6, 1892
488,139	Applegate, E. W.	do	Dec. 13, 1892
495,620	Applegate, E. W.	do	Apr. 18, 1893
483,758	Appleyard, A. E.	Heaters	Oct. 4, 1892
483,759	Appleyard, A. E.	do	Oct. 4, 1892
495,176	Archer, F. M.	Batteries, galvanic	Apr. 11, 1893
495,177	Archer, F. M.	do	Apr. 11, 1893
496,678	Armen, A. H.	Galvanometers	May 2, 1893
499,411	Armstrong, C. G.	Annunciators	June 13, 1893
483,704	Armstrong, D. H.	Cut-outs, mechanical, rotary	Oct. 4, 1892
489,114	Arnold, R. C.	Heating, metal working	Jan. 3, 1893
489,115	Arnold, R. C.	Batteries, secondary	Jan. 3, 1893
488,978	Ashley, R.	Magneto-electric	Jan. 3, 1893
488,645	Ashley, E. L. and Camp, W. H.	Telegraphy, circuit closers, thermal	Dec. 27, 1892
481,775	Athunson, L. B. and C. W.	Mining machines	Aug. 30, 1892
482,433	Atkinson, L. B.	Lighting, systems	Sept. 13, 1892
481,921	Atkinson, L. B., Ravenchaw, H. W. and Mori, F.	Mining machines	Sept. 6, 1892
498,757	Attix, T. F.	Conductors	June 6, 1893
498,605	Atwood, L.	Elevators	May 30, 1893
481,683	Aylsworth, J. W. and Payne, A. C.	Amalgamators, electric mills	Aug. 30, 1892
492,773	Ayres, A. D.	Car brakes	Mar. 7, 1893
488,415	Ayres, R. B.	Station indicators	Dec. 20, 1892
498,607	Ayres, R. B.	do	May 30, 1893
487,703	Ayton, C. W.	Meters	Dec. 13, 1892
498,871	Ayton, C. W.	Telemetry	June 6, 1893
498,872	Ayton, C. W.	do	June 6, 1893
479,046	Bacorn, F. W.	Alarms	July 19, 1892
487,816	Badt, F. B.	Regulators	Dec. 13, 1892
480,543	Badt, F. B.	Railways, systems, converter	Aug. 9, 1892
482,148	Badt, F. B.	Alarms	Sept. 6, 1892
489,597	Badt, F. B.	Railways, systems, converter	Jan. 10, 1893
489,598	Badt, F. B.	Lighting, systems	Jan. 10, 1893
493,672	Badt, F. B.	Batteries, secondary	Mar. 21, 1893
486,524	Baehr, G.	Magneto-electric	Nov. 22, 1892
489,553	Baehr, G.	Cut-outs, mechanical, oscillating snap	Jan. 10, 1893
481,293	Bailey, J. R. and Lincoln, L. C.	Telephones, supports	Aug. 23, 1892
498,529	Baillard, E. V.	Telegraphy, printing, wheel	May 30, 1893
493,745	Bain, F.	Magneto-electric	Mar. 21, 1893

No.	NAME.	CLASS.	DATE.
493,673	Baines, E	Telegraphy, circuits and systems	Mar. 21, 1893
480,004	Baker, C. H	Railways, systems, conduit	Aug. 2, 1892
478,551	Ball, C. M. and Norton, S	Separators	July 12, 1892
480,988	Ball, H. P	Lights, sockets and keys	Aug. 16, 1892
493,609	Ball, H. B. and Metzger, A	do	Mar. 14, 1893
494,750	Ball, H. P	Cut-outs, mechanical, oscillating snap	Apr. 4, 1893
498,374	Ball, H. P	Lights, sockets and keys	May 30, 1893
498,758	Ball, H. P. and Metzger, A	do	June 6, 1893
488,107	Ball, J. O	Meters	Dec. 13, 1892
493,883	Ballet, E	Lights, incandescent, special features	Mar. 21, 1893
499,003	Banks, W. F	Telegraphy, fire, non-interfering	June 6, 1893
494,239	Barnett, H. T	Lighting, systems	Mar. 28, 1893
496,244	Barrett, F. A	Medical and surgical, body-wear	Apr. 25, 1893
482,149	Barrett, J. A	Conductors, anti-inductive	Sept. 6, 1892
482,150	Barrett, J. A	do	Sept. 6, 1892
482,151	Barrett, J. A	do	Sept. 6, 1892
482,152	Barrett, J. A	do	Sept. 6, 1892
482,328	Barrett, J. A	do	Sept. 6, 1892
486,270	Barrett, J. A	Conductors	Nov. 15, 1892
495,770	Bartlett, A	Time alarms	Apr. 18, 1893
489,212	Bartlett, J	Telethermometers	Jan. 3, 1893
494,286	Bartlett, J. B. L	Conductors, lightning-rods	Mar. 28, 1893
493,884	Barry, C. E	Ceiling blocks	Mar. 21, 1893
482,778	Barnard, G. L	Alarms	Sept. 20, 1892
483,203	Bassett, N. C	Elevators	Sept. 27, 1892
483,204	Bassett, N. C	Electric locomotives	Sept. 27, 1892
483,708	Bassett, N. C	Magneto-electric	Oct. 4, 1893
483,732	Bassett, N. C	do	Oct. 4, 1893
493,349	Bassett, N. C	do	Mar. 14, 1893
494,751	Bassett, N. C	Railways, car brakes	Apr. 4, 1893
498,735	Bassler, J. H	Metal working	May 30, 1893
499,277	Bassler, J. H	do	June 13, 1893
488,536	Bates, J. H	Annunciators, drop	Dec. 27, 1892
480,546	Bates, L	Lock strikes, electric	Aug. 9, 1892
492,737	Bates, J. H	Railways, systems, conduit	Feb. 28, 1893
480,651	Baumhoff, G. W	Cut-outs, thermal	Aug. 9, 1892
481,386	Baxter, W., jr	Elevators	Aug. 23, 1892
494,836	Baxendale, A. S	Magneto-electric	Apr. 4, 1893
493,009	Bedell, C. H	Cut-outs, electro-magnetic	Mar. 7, 1893
481,646	Beers, F. H	Motors	Aug. 30, 1892
483,339	Beers, I. F. and F. C	Telegraphy, circuit closers, thermal	Sept. 27, 1892
487,242	Beers, F. H	Motors	Dec. 6, 1892
492,524	Beers, F. H	do	Feb. 28, 1893
497,942	Bell, J. M	Telegraphy, fire	May 23, 1893
483,506	Bell, O. A	Telephones, systems	Sept. 27, 1892
488,053	Bell, O. A	Telephones, systems, multiple switch-board, test.	Dec. 13, 1892
485,027	Benjamin, G. V	Telephones, supports	Oct. 25, 1892
495,240	Benjamin, G. H	Lights, incandescent	Apr. 11, 1893
481,919	Benner, F	Annunciators, time	Aug. 30, 1892
479,386	Bennett, M	Conductors, lead covered	July 19, 1892
489,861	Bennett, G. H	Lights, incandescent, special features	Jan. 10, 1893
488,179	Bentley, E. M	Railways, systems, overhead, trolley	Dec. 20, 1892
490,762	Bentley, E. M	Cut-outs, mechanical	Jan. 31, 1893
478,215	Berdan, H	Submarine guns	July 5, 1892
478,216	Berdan, H	Projectiles, shells	July 5, 1892
484,580	Bergmann, S	Lights, sockets and keys	Oct. 18, 1892
481,999	Bermer, E	Pyro-magnets, electric devices	Sept. 6, 1892
495,193	Berne, A. W	Railway signals, cab, sectional rail	Apr. 11, 1893
500,110	Berrigan, W. H., jr	Telegraphy, circuit closers	June 27, 1893
492,456	Berry, F. H	Motors, hand operating devices	Feb. 28, 1893
481,711	Bessey, M. W	Alarms, burglar	Aug. 30, 1892
489,428	Biaggi, A	Time lamp lighters	Jan. 3, 1893
482,568	Bigland, H. H. and Burns, J	Lights, arc, gravity feed, gear-clutch	Sept. 13, 1892
490,183	Billberg, C. O. C	Magneto-electric	Jan. 17, 1893
482,157	Birch, J. T	Lights, arc, positive feed, gear-clutch	Sept. 6, 1892
494,053	Birkin, W. A. G	Motors, reciprocating	Mar. 21, 1893
482,719	Blackwell, F. O	Railways, systems, conduit	Sept. 20, 1892
492,457	Blackwell, F. O	Railway signals, sectional rail	Feb. 28, 1893
482,974	Blathy, O. T	Motors, alternating	Sept. 20, 1892
480,802	Blathy, O. T	Cut-outs, thermal	Aug. 16, 1892
497,113	Blathy, O. T	Motors, alternating	May 9, 1893
484,990	Blackman, H	Electrolysis, aqueous bath, chemicals	Oct. 25, 1892
495,772	Bleauvalet, E. E. and L. C	Lights, arc, gravity feed, gear-clutch	Apr. 18, 1893
492,883	Bloomer, C. T	Telephones, electric	Mar. 7, 1893
493,907	Bloomer, C. T	Telephones, switches	Mar. 21, 1893
499,090	Bodine, J	Connectors	June 6, 1893

No.	NAME.	CLASS.	DATE.
488,261	Bogue, C. J.	Regulators	Dec. 20, 1892
491,978	Bolte, F. H.	Time checks	Feb. 21, 1893
493,328	Bonebrake, L. P.	Cut-outs, thermal	Mar. 14, 1893
485,367	Bosch, A.	Telegraphy, fire, engine house apparatus	Nov. 1, 1892
482,940	Bossert, W. F. and Findlay, J. H.	Lights, arc, special features	Sept. 20, 1892
489,364	Bossert, W. F.	Cut-outs, thermal	Jan. 3, 1893
493,243	Bossert, W. F.	Cut-outs, mechanical, oscillating snap	Mar. 14, 1893
482,780	Boughton, C. V.	Lighting, systems	Sept. 20, 1892
481,132	Bowen, W. J.	Insulators	Aug. 16, 1892
481,133	Bowen, W. J.	Telephones, mechanical	Aug. 16, 1892
494,520	Boyd, B. Y.	Medical and surgical	Mar. 28, 1893
496,550	Boynton, E. M.	Electric locomotives	May 2, 1893
484,549	Brace, De Witt B.	Transmission of power	Oct. 18, 1892
480,689	Bradford, C. W.	Telegraphy, keys	Aug. 9, 1892
486,078	Bradley, C. S.	Magneto-electric	Nov. 15, 1892
496,551	Bradford, E. W.	Mail-bag catchers	May 2, 1893
493,678	Bradford, J. and Williams, J. P.	Railway signals, cab, sectional rail	Mar. 21, 1893
481,220	Bradley, C. S. and Wood, J. J.	Magneto-electric	Aug. 23, 1892
488,305	Bradley, C. S.	Motors, alternating	Dec. 20, 1892
488,306	Bradley, C. S.	do	Dec. 20, 1892
488,307	Bradley, C. S.	Lighting, systems	Dec. 20, 1892
491,465	Bradley, C. S.	Transmission of power	Feb. 7, 1893
492,480	Bradley, C. S.	Inductoriums, transformers, rotary	Feb. 28, 1893
498,153	Bradley, J. L.	Telegraphy, circuit closers, thermal	May 23, 1893
479,397	Bradley, S. R.	Conductors, underground	July 26, 1892
497,515	Brady, T. H.	Insulators	May 16, 1893
479,052	Bragdon, W. B.	Towers, telegraph poles	July 19, 1892
478,152	Bridger, H. C.	Telegraphy, automatic	July 5, 1892
479,932	Brillie, L. V.	Meters	Aug. 2, 1892
486,757	Brockie, J.	Lights, arc, gravity feed, clutch	Nov. 22, 1892
489,179	Brodie, W. H.	Store service, switches	Jan. 3, 1893
500,375	Brodie, W. H.	Hoisting, elevated carrier	June 27, 1893
481,916	Brokhoroff, W.	Clocks, electric	Aug. 30, 1892
482,913	Brooks, H. H.	Insulators	Sept. 20, 1892
493,969	Brown, C.	Electric locomotives	Mar. 21, 1893
481,138	Brown, F. H.	Telephones, magnetic	Aug. 16, 1892
490,064	Brown, F. H.	Telegraphy, circuits and systems	Jan. 17, 1893
493,245	Brown, G. McC	Telephones, details	Mar. 14, 1893
493,679	Brown, H. P.	Magneto-electric	Mar. 21, 1893
488,706	Browne, W. L.	Railways, systems, overhead, trolley	Dec. 27, 1892
485,859	Bruening, W.	Telephones, magnetic	Nov. 8, 1892
492,265	Bryan, F. W.	Railways, systems, conduit	Feb. 21, 1893
480,804	Bryson, A., jr.	Railways, systems, telfer	Aug. 16, 1892
480,805	Bryson, A., jr.	Pneumatics, rail, dispatch tubes	Aug. 16, 1892
497,117	Buchanan, C. G.	Mills, magnetic separators	May 9, 1893
486,926	Buck, H. C.	Electro-magnets	Nov. 29, 1892
487,981	Buckingham, C. L.	Telegraphy, printing	Dec. 13, 1892
487,982	Buckingham, C. L.	do	Dec. 13, 1892
487,983	Buckingham, C. L.	do	Dec. 13, 1892
487,984	Buckingham, C. L.	do	Dec. 13, 1892
487,985	Buckingham, C. L.	do	Dec. 13, 1892
487,986	Buckingham, C. L.	do	Dec. 13, 1892
480,915	Buffinton, E. W.	Lights, special features	Aug. 16, 1892
482,993	Bunce, L. P.	Railways, systems, closed conduit	Sept. 20, 1892
488,687	Bundy, W. L.	Time checks	Dec. 27, 1892
498,422	Burnley, W.	Batteries, galvanic	May 30, 1893
486,176	Burton, G. D. and Angell, E. E.	Heating, metal working	Nov. 15, 1892
486,624	Burton, G. D. and Angell, E. E.	do	Nov. 22, 1892
486,625	Burton, G. D.	do	Nov. 22, 1892
486,626	Burton, G. D. and Angell, E. E.	do	Nov. 22, 1892
486,627	Burton, G. D. and Angell, E. E.	do	Nov. 22, 1892
486,818	Burton, G. D.	do	Nov. 22, 1892
488,466	Burton, G. D. and Angell, E. E.	do	Dec. 20, 1892
488,467	Burton, G. D. and Angell, E. E.	do	Dec. 20, 1892
488,468	Burton, G. D. and Angell, E. E.	do	Dec. 20, 1892
488,469	Burton, G. D. and Angell, E. E.	do	Dec. 20, 1892
496,591	Burton, G. D. and Angell, E. E.	Metal working	May 2, 1893
496,592	Burton, G. D.	do	May 2, 1893
496,593	Burton, G. D.	do	May 2, 1893
496,594	Burton, G. D.	do	May 2, 1893
496,775	Burton, G. D. and Angell, E. E.	do	May 2, 1893
499,964	Burton, G. D. and Angell, E. E.	do	June 20, 1893
478,086	Butcher, J.	Adometers	July 5, 1892
478,565	Butler, L. C.	Tables, wall	July 12, 1892
479,782	Butler, B. F.	Telegraphy, keys	Aug. 2, 1892
488,424	Butler, L. W.	Elevators, controllers	Dec. 20, 1892
495,472	Buxtorf, E.	Knitting and netting, feeding	Apr. 18, 1893

No.	NAME.	CLASS.	DATE.
489,522	Cahall, W. C	Batteries, galvanic	Jan. 10, 1893
489,216	Calhoun, H	Mills, electric amalgamator	Jan. 3, 1893
498,763	Callender, R	Electro-magnets	June 6, 1893
496,863	Caney, T	Electrolysis, aqueous bath, chemicals	May 9, 1893
496,864	Caney, T	do	May 9, 1893
496,865	Caney, T	do	May 9, 1893
482,074	Capek, J. V	Heaters	Sept. 6, 1892
491,982	Capek, J. V	Motors	Feb. 21, 1893
499,908	Cathrein, J	Lights, incandescent, special features	June 20, 1893
478,683	Cavner, A. R	Head lights	July 12, 1892
485,682	Carey, A. C	Lights, incandescent	Nov. 8, 1892
485,089	Carhart, H. S	Batteries, galvanic	Oct. 25, 1892
495,782	Carnes, R. F	Medical and surgical, electric soles	Apr. 18, 1893
481,781	Carpenter, C. E	Rheostats	Aug. 30, 1892
492,757	Carpenter, C. E	do	Feb. 28, 1893
492,758	Carpenter, C. E	do	Feb. 28, 1893
490,870	Carr, W. H	Alarms, burglar	Jan. 31, 1893
497,263	Carstarphen, W. P., jr	Igniting devices, manual	May 9, 1893
497,404	Carstarphen, W. P., jr	Igniting devices	May 16, 1893
486,820	Carter, F. S	Annunciators, drop	Nov. 22, 1892
493,067	Carter, F. S	Annunciators, time	Mar. 7, 1893
486,243	Carter, F. S. and Stumpf, G. P	Annunciators, drop systems	Nov. 15, 1892
495,929	Carter, W. and Willey, C. E	Igniting devices, manual	Apr. 18, 1893
484,626	Carty, J. J	Telephones, systems	Oct. 18, 1892
495,179	Carty, J. J	do	Apr. 11, 1893
495,180	Carty, J. J. and Pickernell, F. A	Telephones, details	Apr. 11, 1893
494,710	Carver, J. W. and C. E	Towers, telegraph poles	Apr. 4, 1893
500,053	Cary, E. E	Lights, incandescent	June 20, 1893
492,659	Cattori, M	Railways, systems, circuit, series	Feb. 28, 1893
492,913	Chambers, J. C	Igniting devices, manual	Mar. 7, 1893
488,385	Chase, E. B	Telephones, details	Dec. 20, 1892
481,613	Chase, H. A	Telegraphy, fire	Aug. 30, 1892
488,064	Chase, H. C	Separators	Dec. 13, 1892
499,095	Chase, J	Railways, systems, overhead, trolley	June 6, 1893
496,597	Chatlin, S. C	Electrolysis, aqueous bath, apparatus	May 2, 1893
480,762	Cherry, H. H. and Youngslove, S. D	Magneto-electric	Aug. 16, 1892
497,120	Chinnoek, C. E	Telegraphy, lightning arresters	May 9, 1893
480,656	Christy, J. A	Telephones, electric	Aug. 9, 1892
494,667	Clamer, F. J	Galvanizing	Apr. 4, 1893
494,668	Clamer, F. J	do	Apr. 4, 1893
486,244	Clamond, C	Telephones, electric	Nov. 15, 1892
479,557	Clark, E. A	Electrolysis, aqueous bath, apparatus	July 26, 1892
496,859	Clark, E. A	Telephones, systems, divided central	May 9, 1893
498,236	Clark, E. A	Telephones, systems, automatic	May 30, 1893
481,297	Clark, J. H	Motors, hand operating devices	Aug. 23, 1892
479,786	Clark, M. M	Batteries, galvanic	Aug. 2, 1892
482,297	Clark, W. H	Insulators	Sept. 6, 1892
491,874	Clarke, F. H	Railway signals, cab, sectional rail	Feb. 14, 1893
487,046	Clegg, J	Lights, filaments and carbons	Nov. 29, 1892
495,692	Clemminshaw, C. G. and Bradt, W. H	Railways, systems, overhead, trolley	Apr. 18, 1893
478,689	Cleveland, W. B	Cut-outs, mechanical	July 12, 1892
500,192	Clewley, W. H	Igniting devices, manual	June 27, 1893
483,044	Clift, J	Canopy, shades and reflectors	Sept. 20, 1892
495,624	Clute, N. J	Car brakes	May 30, 1893
481,726	Clute, V. S	Knitting and netting, stopping	Aug. 30, 1892
499,871	Cochran, H	Railways, systems, overhead, trolley	June 20, 1893
484,530	Coerper, C	Lights, arc, gravity feed, gear-clutch	Oct. 18, 1892
481,847	Coffee, A. J	Telegraphy, fire, non-interfering	Aug. 30, 1892
483,423	Coffin, C. L	Heating, metal working	Sept. 27, 1892
483,424	Coffin, C. L	do	Sept. 27, 1892
483,425	Coffin, C. L	do	Sept. 27, 1892
483,426	Coffin, C. L	do	Sept. 27, 1892
483,427	Coffin, C. L	do	Sept. 27, 1892
483,428	Coffin, C. L	do	Sept. 27, 1892
487,607	Coffin, C. L	do	Dec. 6, 1892
488,871	Coffin, C. L	Heating, soldering	Dec. 27, 1892
488,872	Coffin, C. L	do	Dec. 27, 1892
492,713	Coffin, C. L	Heating, metal working	Feb. 28, 1893
495,393	Coffin, C. L	do	Apr. 11, 1893
495,394	Coffin, C. L	do	Apr. 11, 1893
499,518	Coffin, C. L	Metal working	June 13, 1893
499,519	Coffin, C. L	do	June 13, 1893
499,657	Coffin, C. L	do	June 13, 1893
498,878	Colby, E. A	Lights, incandescent	June 6, 1893
498,879	Colby, E. A	do	June 6, 1893
498,929	Colby, F. A	do	June 6, 1893
499,097	Colby, F. A	do	June 6, 1893

No.	NAME.	CLASS.	DATE.
495,306	Coleman, C. J.	Batteries, galvanic	Apr. 11, 1893
495,107	Coleman, G. D.	Batteries, secondary	Apr. 11, 1893
487,176	Coles, C. S. O.	Electrolysis, aqueous bath, alloys	Nov. 29, 1892
479,753	Colgate, A. E.	Batteries, secondary	July 26, 1892
484,778	Collier, A. T.	Telephones, electric	Oct. 25, 1892
495,148	Collins, R. G.	Steam engines, recording indicators	Apr. 11, 1893
482,420	Compton, M. D.	Telegraphy, circuit closers, thermal	Sept. 13, 1892
481,474	Conkling, G.	Separators	Aug. 23, 1892
479,134	Conover, C. E.	Insulators	July 19, 1892
480,319	Conover, G. W.	Bells	Aug. 9, 1892
482,863	Conradson, C. M.	Electric locomotives	Sept. 20, 1892
487,114	Conradson, C. M.	do	Nov. 29, 1892
497,771	Cook, S. M.	Heaters	May 23, 1893
497,907	Cooke, P.	Coin controlled apparatus, telephones	May 23, 1893
478,186	Cooke, E. T. and Makay, W. H.	Lighting, systems	July 5, 1892
481,223	Cords, A. B. and W. H.	Indicators	Aug. 23, 1892
499,780	Cornig, F. G.	Batteries, secondary	June 20, 1893
496,041	Corrington, M.	Railway signals, block system	Apr. 25, 1893
484,140	Cortland, H.	Telegraphy, fire, automatic	Oct. 11, 1892
482,421	Cory, C.	Indicators	Sept. 13, 1892
492,786	Coyle, A. M.	Regulators	Mar. 7, 1893
493,485	Coyle, A. M.	Motors, hand operating devices	Mar. 14, 1893
480,073	Crabtree, L. T.	Annunciators	Aug. 2, 1892
491,837	Crabtree, L. T.	Railway signals	Feb. 14, 1893
482,724	Craney, T.	Electrolysis, aqueous bath, anodes	Sept. 20, 1892
488,708	Craney, T.	Electrolysis, aqueous bath	Dec. 27, 1892
498,768	Craney, T.	Electrolysis, aqueous bath, chemicals	June 6, 1893
498,769	Craney, T.	do	June 6, 1893
498,770	Craney, T.	do	June 6, 1893
498,771	Craney, T.	do	June 6, 1893
481,785	Cravath, P.	Lighting, systems	Aug. 30, 1892
483,761	Creighton, W. G.	Railways, systems, closed conduit	Oct. 4, 1892
500,279	Criggal, J.	Lights, filaments and carbons	June 27, 1893
494,978	Crocker, F. B. and Wheeler, S. S.	Motors	Apr. 4, 1893
493,754	Crockett, C. H. and Allen, C. C.	Ceiling blocks	Mar. 21, 1893
493,755	Crockett, C. H. and Allen, C. C.	Lights, incandescent, special features	Mar. 21, 1893
482,339	Crolns, E. R.	do	Sept. 13, 1892
497,001	Crompton, R. E. B.	Magneto-electric	May 9, 1893
495,603	Crosby, G. C.	Mills, magnetic separators	Apr. 18, 1893
485,319	Croesus, W. A.	Batteries, galvanic	Nov. 1, 1892
497,310	Cullen, W. A.	Lighting, systems	May 16, 1893
497,535	Cummings, J. F.	Conductors, underground	May 16, 1893
497,536	Cummings, J. F.	do	May 16, 1893
490,948	Cumings, J. W.	Medical and surgical, body-wear	Jan. 31, 1893
497,491	Cuno, C.	Lighting, systems	May 16, 1893
491,531	Currier, J. B.	Telephones, calls	Feb. 14, 1893
491,532	Currier, J. B. and Rice, D. H.	do	Feb. 14, 1893
495,626	Curtis, J. D.	Wire-working, joining	Apr. 18, 1893
480,491	Cutten, E. B.	Electrolysis, aqueous bath, chemicals	Aug. 9, 1892
480,492	Cutten, E. B.	do	Aug. 9, 1892
480,493	Cutten, E. B.	do	Aug. 9, 1892
483,545	Cutten, E. B.	Motors	Oct. 4, 1893
487,002	Cutter, G.	Telegraphy, circuit closers, thermal	Nov. 29, 1892
482,435	Cutter, H. H.	Lights, arc, gravity feed, gear-clutch	Sept. 13, 1892
488,141	Cuttriss, C.	Conductors	Dec. 13, 1892
500,226	Cuttriss, C.	Telegraphy, automatic	June 27, 1893
484,386	D'Almeida, J. J. and Da Silva, J. Y.	Telegraphy, circuit closers, thermal	Oct. 18, 1892
499,099	Dahl, O.	Motors	June 6, 1893
489,070	Daniels, C. F.	Magneto-electric	Jan. 3, 1893
489,071	Daniels, C. F.	do	Jan. 3, 1893
482,422	Danley, R. J. M.	Railway signals, sectional rail	Sept. 13, 1892
482,423	Danley, R. J. M.	do	Sept. 13, 1892
478,155	Darche, G. C.	Time alarms	July 5, 1892
496,473	Daves, W. and Peddle, W. H.	Railway signals	May 2, 1893
489,603	Davidson, J. L.	Telephones, details	Jan. 10, 1893
488,388	Davis, A. G.	Bells	Dec. 20, 1892
498,243	Davis, A. G.	Telephones, details	May 30, 1893
489,938	Davis, J. H.	Batteries, galvanic	Jan. 17, 1893
478,410	Davis, J. W.	Railways, systems, overhead, trolley	July 5, 1892
493,618	Davis, J. and Huntington, R. M.	Railways, systems, conduit	Mar. 14, 1893
481,842	De Bovet, A.	Car brakes	Aug. 30, 1892
478,274	Decrow, W. E.	Lights, arc, special features	July 5, 1892
478,275	Decrow, W. E.	Annunciators, step-by-step	July 5, 1892
486,702	Decrow, W. E.	Telegraphy, fire	Nov. 22, 1892
493,253	Decrow, W. E.	Recorders	Mar. 14, 1893
479,887	De Lalande, F.	Batteries, galvanic	Aug. 2, 1892
494,149	De Lodyguine, A.	Lights, filaments and carbons	Mar. 28, 1893

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494,150	De Lodyguine, A	Lights, filaments and carbons	Mar. 28, 1893
494,151	De Lodyguine, A	do	Mar. 28, 1893
498,901	De Lodyguine, A	Lights, incandescent	June 6, 1893
479,791	Demmick, G. W	Lamps and gas fittings, guards	Aug. 2, 1892
495,026	Demmick, G. W	Electro-magnets	Apr. 11, 1893
496,743	De Meritens, A. L	Batteries, galvanic	May 2, 1893
478,788	Denio, W. L	Telegraphy, circuit closers	July 12, 1892
478,789	Denio, W. L	Telegraphy, fire, automatic	July 12, 1892
498,462	Denison, J. F	Motors	May 30, 1893
498,911	Denison, S. P	Telegraphy, automatic	June 6, 1893
488,329	De Puydt, A	Lights, arc, gravity feed, gear-clutch	Dec. 20, 1892
489,625	Desant, W. F. Z	Railway signals	Jan. 10, 1893
489,629	Desant, W. F. Z	do	Jan. 10, 1893
498,880	Des Brisay, J	Cut-outs, mechanical, oscillating snap	June 6, 1893
495,456	De Voe, W. R	Railways, systems, conduit	Apr. 11, 1893
499,374	De Voe, W. R	do	June 13, 1893
479,493	Dewey, M. W	Railways, systems, converter	July 26, 1892
484,182	Dewey, M. W	Heaters	Oct. 11, 1892
490,011	Dibble, F. J	Meters	Jan. 17, 1893
490,012	Dibble, F. J	Telemeters	Jan. 17, 1893
490,013	Dibble, F. J	do	Jan. 17, 1893
490,014	Dibble, F. J	do	Jan. 17, 1893
491,988	Diekinson, A	Railways, systems, overhead, trolley	Feb. 21, 1893
497,540	Di Giovanni, G. G	Lights, incandescent, special features	May 16, 1893
496,724	Dillman, W. C. and Leib, G. A	Telegraphy, fire, automatic	May 2, 1893
496,474	Dillon, J	Lights, incandescent, special features	May 2, 1893
482,727	Dillon, T	Lights, arc, special features	Sept. 20, 1892
498,969	Dillon, W. S. F	Magneto-electric	June 6, 1893
488,351	Dion, L. O	Railways, systems, closed conduit	Dec. 20, 1892
482,917	Dix, H. S	Cordage, packaging braid and yarn	Sept. 20, 1892
479,183	Dobbie, R. S	Lights, arc and incandescent	July 19, 1892
491,990	Dorman, G. E	Magneto-electric	Feb. 21, 1893
489,526	Donbleday, H. M	Lighting, systems	Jan. 10, 1893
486,417	Dow, A	Regulators	Nov. 15, 1892
480,384	Dow, H. H	Batteries, galvanic	Aug. 9, 1892
483,431	Dreskell, W. M	Motors	Sept. 27, 1892
498,537	Dressler, C. E	Inductoriums, transformers, rotary	May 30, 1893
498,538	Dressler, C. E	Magneto-electric	May 30, 1893
478,417	Drew, H. P	Lights, incandescent, special features	July 5, 1892
497,869	Dryardin, P. J. R	Batteries, secondary	May 23, 1893
478,692	D'Unger, P. H	Telephones, electric	July 12, 1892
495,695	Duncan, W	Railways, systems, overhead, trolley	Apr. 18, 1893
500,263	Duncan, W	do	June 27, 1893
498,539	Duggan, F. A	Lighting, ceiling blocks	May 30, 1893
494,629	Dunn, D. W	Magneto-electric	Apr. 4, 1893
493,375	Dunn, G. S	do	Mar. 14, 1893
482,343	Dupus, G. A	Railways, systems, closed conduit	Sept. 13, 1892
481,483	Dyer, R. N	Telephones, systems	Aug. 23, 1892
498,160	Dyer, F. L. and L. W	Motors	May 23, 1893
484,877	Eames, H. H	Separators	Oct. 25, 1892
481,692	Eastman, W. J	Igniting devices, manual	Aug. 30, 1892
478,276	Eayrs, W. P	Rheostats	July 5, 1892
483,712	Eckstrom, A	Cut-outs, mechanical	Oct. 4, 1893
483,713	Eckstrom, A	do	Oct. 4, 1893
494,739	Eckstrom, A	Magneto-electric	Apr. 4, 1893
491,878	Edgerton, N. H	Batteries, secondary	Feb. 14, 1893
478,743	Edison, T. A	Telephones, relays and repeaters	July 12, 1892
484,185	Edison, T. A	Lights, filaments and carbons	Oct. 11, 1892
480,567	Edison, T. A	Telegraphy, quadruplex	Aug. 9, 1892
482,549	Edison, T. A	Regulators	Sept. 13, 1892
484,183	Edison, T. A	Meters	Oct. 11, 1892
484,184	Edison, T. A	Lights, filaments and carbons	Oct. 11, 1892
485,615	Edison, T. A	do	Nov. 8, 1892
485,616	Edison, T. A	do	Nov. 8, 1892
485,617	Edison, T. A	do	Nov. 8, 1892
485,841	Edison, T. A	Separators	Nov. 8, 1892
485,842	Edison, T. A	do	Nov. 8, 1892
486,634	Edison, T. A	Telegraphy, railway car	Nov. 22, 1892
490,953	Edison, T. A	Batteries, galvanic	Jan. 31, 1893
491,992	Edison, T. A	Cut-outs, thermal	Feb. 21, 1893
492,150	Edison, T. A	Lights, filaments and carbons	Feb. 21, 1893
492,789	Edison, T. A	Telephones, electric	Mar. 7, 1893
493,425	Edison, T. A	Electric locomotives	Mar. 14, 1893
496,191	Edison, T. A	Phonographs	Apr. 25, 1893
499,879	Edison, T. A	Graphophones	June 20, 1893
479,184	Edison, T. A. and Kenny, P	Telegraphy, automatic	July 19, 1892
479,207	Edmond, W. J. and Keon, T. J	Lamps and gas fittings, globes	July 19, 1892

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496,728	Edmonson, J. and Oulton, J	Meters	May 2, 1893
495,932	Edmunds, H., jr	Lighting, systems	Apr. 18, 1893
491,208	Edmonds, W. H	Insulators	Feb. 7, 1893
485,537	Edwards, E. A	Lights, arc, gravity feed	Nov. 1, 1892
496,869	Egan, C. E	Fire alarms	May 9, 1893
500,229	Egger, E	Cut-outs, thermal	June 27, 1893
492,394	Eichberg, W. N	Insulators	Feb. 28, 1893
479,118	Eikemeyer, R	Magneto-electric	July 19, 1892
480,918	Eikemeyer, R	Electric locomotives	Aug. 16, 1892
482,825	Eikemeyer, R	Magneto-electric	Sept. 20, 1892
486,094	Eickemeyer, R	Batteries, secondary	Nov. 15, 1892
497,494	Einstein, J	Lights, arc, positive feed, gear-clutch	May 16, 1893
496,402	Eisenmam, R	Music, electric actions	May 2, 1893
482,425	Ekert, T. T	Batteries, galvanic	Sept. 13, 1892
479,410	Eklund, A. M	Medical and surgical, body-wear	July 26, 1892
479,062	Eldredge, D	Telephones, details	July 19, 1892
496,192	Elfering, J. H	Annunciators, step-by-step	Apr. 25, 1893
479,793	Elkins, W. H	Magneto-electric	Aug. 2, 1892
485,181	Elkins, W. H	Regulators	Nov. 1, 1892
494,849	Elison, C. P	Batteries, secondary	Apr. 4, 1893
487,213	Elliott, C. B	Lights, sockets and keys	Nov. 29, 1892
499,662	Elliott, C. B	Railways, conductor supports and insulators	June 13, 1893
491,268	Elliott, E. R	Lights, sockets and keys	Feb. 7, 1893
487,519	Elliott, F. O	Telegraphy, circuit closers, thermal	Dec. 6, 1892
483,482	Elridge, H	Lamps and gas fittings, globes	Sept. 27, 1892
495,582	Emme, M	Batteries, galvanic	Apr. 18, 1893
481,664	Engledue, W. J	do	Aug. 30, 1892
498,776	Englund, A. H	Railways, conductor supports and insulators	June 6, 1893
480,813	Enos, A. T	Lights, incandescent, special features	Aug. 16, 1892
496,871	Erickson, O	Meters	May 9, 1893
439,075	Erkins, C. R. H	Telegraphy, circuit closers, thermal	Jan. 3, 1893
478,097	Evershed, S	Galvanometers	July 5, 1892
478,098	Evershed, S	do	July 5, 1892
484,785	Evershed, S	Magneto-electric	Oct. 25, 1892
479,834	Espinosa, Y. J. O	Telegraphy, circuit closers	Aug. 2, 1892
493,918	Evans, P	Railways, systems	Mar. 21, 1893
495,318	Faben, T. H	Lamps and gas fittings, shade supports	Apr. 11, 1893
495,030	Fahrney, W. H	Telegraphy, circuits and systems	Apr. 11, 1893
485,618	Farret, F	Electrolysis, aqueous bath apparatus	Nov. 8, 1892
499,664	Fay, T. J	Cut-outs, thermal	June 13, 1893
488,550	Field, S. D	Telegraphy, relays and repeaters	Dec. 27, 1892
491,163	Field, S. D	Telegraphy, dynamo	Feb. 7, 1893
496,513	Field, S. D	Telephones, systems	May 2, 1893
496,602	Field, S. D	Telephones, magnetic	May 2, 1893
482,506	Fisher, J	Railways, systems, conduit	Sept. 13, 1892
483,999	Fiske, B. A	Distance instruments	Oct. 11, 1892
485,619	Fiske, J. P. B	Motors, hand operating devices	Nov. 8, 1892
485,620	Fiske, J. P. B	do	Nov. 8, 1892
494,852	Fitch, D. H	Batteries, galvanic	Apr. 4, 1893
483,050	Fitzmaurice, J. S	Printing, branding stamps	Sept. 20, 1892
480,573	Flagg, S. H	Conductors, underground	Aug. 9, 1892
485,343	Fletcher, C. R	Electrolysis, aqueous bath, cathodes	Nov. 1, 1892
499,726	Fletcher, C. R	Electrolysis, aqueous bath	June 20, 1893
492,492	Fletcher, W. C	Car brakes	Feb. 28, 1893
494,778	Flora, E. E	Coin-controlled apparatus, phonographs	Apr. 4, 1893
494,807	Flora, E. E	do	Apr. 4, 1893
494,098	Folger, C. H	Bells	Mar. 21, 1893
494,525	Fontaine, E	Railway signals, block systems	Mar. 28, 1893
489,559	Foote, G. L	Batteries, galvanic	Jan. 10, 1893
484,150	Forbes, C. S	Telephones, magnetic	Oct. 11, 1892
500,481	Forbes, C. S	Telephones, electric	June 27, 1893
481,019	Ford, B	Lights, sockets and keys	Aug. 16, 1892
478,956	Ford, W. H	Railways, systems, closed conduit	July 12, 1892
479,795	Fortier, C. L	Valve controllers	Aug. 2, 1892
480,766	Fortin, C	Railways, systems, overhead, trolley	Aug. 16, 1892
489,158	Foster, G. C. H	Lights, sockets and keys	Jan. 3, 1893
479,358	Foster, S. L	Yarn and thread	July 19, 1892
486,807	Fowler, W	Alarms	Nov. 22, 1892
498,468	Fowler, W. M	Time alarms	May 30, 1893
488,993	Francis, J. C	Telephones, switches	Jan. 3, 1893
483,108	Franke, A	Valve controllers	Sept. 20, 1892
481,617	Freeman, J. P	Cut-outs, electro-magnetic	Aug. 30, 1892
497,649	Freeman, J. P	Telephones, magnetic	May 16, 1893
491,095	Freeman, W. E	Lights, arc, gravity feed, clutch	Feb. 7, 1893
492,151	Freeman, W. E	Magneto-electric	Feb. 21, 1893
497,468	Freeman, W. K	do	May 16, 1893
486,457	Frei, G. A	Lights, incandescent	Nov. 22, 1892

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487,477	Frei, G. A	Lights, incandescent	Dec. 6, 1892
487,478	Frei, G. A	do	Dec. 6, 1892
497,955	Frei, G. A	Lights, incandescent, special features	May 23, 1893
497,956	Frei, G. A	Cut-outs, thermal	May 23, 1893
497,957	Frei, G. A	Lights, incandescent	May 23, 1893
499,916	Frei, G. A	do	June 20, 1893
493,620	Freir, S. P.	Telegraphy, quadruplex	Mar. 14, 1893
496,514	Fritsche, W.	Magneto-electric	May 2, 1893
487,390	Fröhlich, O.	Electrolysis, ozone	Dec. 6, 1892
490,279	Fröhlich, O.	Meters	Jan. 24, 1893
497,529	Fröhlich, O.	Galvanometers	May 16, 1893
497,539	Fröhlich, O.	do	May 16, 1893
495,547	Fuller, R.	Motors	Apr. 18, 1893
486,232	Fuller, F. H. and Perkins, C. B.	Telegraphy, fire	Nov. 15, 1892
480,009	Furgang, R.	Lighting, systems	Aug. 2, 1892
481,665	Furgang, R.	do	Aug. 30, 1892
481,666	Furgang, R.	do	Aug. 30, 1892
480,575	Gandino, G.	Batteries, secondary	Aug. 9, 1892
484,532	Gardner, A. D.	Heaters	Oct. 18, 1892
495,936	Gardner, F.	Artesian and oil wells, cleaning	Apr. 18, 1893
480,576	Gardner, W. F.	Clocks, electric	Aug. 9, 1892
480,577	Gardner, W. F.	do	Aug. 9, 1892
498,973	Garnett, D. M. and J. H.	Printing, sheet stencils making	June 6, 1893
499,223	Garringer, C. R.	Balances, electric attachments	June 13, 1893
490,903	Gartland, F. X.	Lights, incandescent	Jan. 31, 1893
488,002	Garton, W. R.	Telegraphy, lightning arresters	Dec. 13, 1892
21,701	Gaston, J. E.	(Design) Lamps and gas fittings, shades	July 12, 1892
482,240	Gaston, J. E.	Lights, arc, positive feed, gear-clutch	Sept. 6, 1892
490,959	Gay, A.	Magneto-electric connecting devices	Jan. 31, 1893
478,792	Gaynor, J.	Glass molds	July 12, 1892
499,321	Gear, S. W.	Railways, systems, overhead	June 13, 1893
489,736	Geary, J. E.	Annunciators, step-by-step	Jan. 10, 1893
495,086	Gengenbach, E.	Galvanometers	Apr. 11, 1893
500,199	George, J. S., jr.	Cut-outs, mechanical, rotary	June 27, 1893
500,200	George, J. S., jr.	do	June 27, 1893
500,201	George, J. S., jr.	do	June 27, 1893
478,230	Gerry, J. H. and Long, C. E.	Batteries, secondary	July 5, 1892
487,324	Gethins, J. L.	Batteries, galvanic	Dec. 6, 1892
490,746	Gibbs, J. S.	Cut-outs, mechanical, rotary	Jan. 31, 1893
480,694	Gibbs, J. S.	do	Aug. 9, 1892
471,529	Gibboney, J. W.	Telephones, electric	Aug. 23, 1892
498,710	Gibson, C. S.	Time alarms	May 30, 1893
479,325	Gill, W. E.	Connectors	July 19, 1892
478,324	Gillett, C. F.	Telephones, switch-boards	July 5, 1892
486,332	Gipperich, A.	Telegraphy, circuits and systems	Nov. 15, 1892
483,782	Giraud, P.	Batteries, thermal	Oct. 4, 1893
481,560	Giscom, W. W.	Batteries, secondary	Aug. 30, 1892
479,500	Githens, G. M.	Blasting stone	July 26, 1892
489,944	Goetz, A. C.	Railways, tramway	Jan. 17, 1893
491,014	Goetz, J. J. and Smith, J. A.	Railways, systems, overhead, trolley	Jan. 31, 1893
489,302	Golden, W. T. and Atkinson, L. B.	Magneto-electric	Jan. 3, 1893
11,341	Goldkind, I.	(Reis.) Lights, sockets and keys	May 23, 1893
479,359	Goldkind, I.	do	July 19, 1892
479,772	Goodson, G. A. and Capehart, A. S.	Matrix making	July 26, 1892
479,773	Goodson, G. A.	do	July 26, 1892
480,720	Goold, F. D'A.	Street lamps	Aug. 16, 1892
480,721	Goold, F. D'A.	Lights, arc, gravity feed, clutch	Aug. 16, 1892
480,722	Goold, F. D'A.	Cut-outs, mechanical, oscillating snap	Aug. 16, 1892
489,668	Goold, F. D'A.	do	Jan. 10, 1893
489,674	Goold, F. D'A.	do	Jan. 10, 1893
491,548	Goold, F. D'A.	Lights, arc, gravity feed, gear-clutch	Feb. 14, 1893
492,008	Goold, F. D'A.	Lights, arc, special features	Feb. 21, 1893
498,387	Goold, F. D'A.	Lights, arc, non feeding	May 30, 1893
494,856	Goolden, W. T. and Atkinson, L. B.	Magneto-electric	Apr. 4, 1893
499,786	Goodman, E. J.	Surgery, movement cure	June 20, 1893
489,185	Goodrich, C. F.	Magneto-electric	Jan. 3, 1893
493,704	Goodridge, W. M.	Telephones, systems	Mar. 21, 1893
487,049	Görge, J. H. F.	Lights, incandescent	Nov. 29, 1892
489,249	Görge, J. H. F.	Galvanometers	Jan. 3, 1893
492,353	Gott, C. P.	Measuring instruments, passenger registers	Feb. 21, 1893
500,488	Gratiaa, S. D.	Lights, incandescent, special features	June 27, 1893
496,381	Gray, A. E.	Telephones, switch-boards	Apr. 25, 1893
491,346	Gray, E.	Telegraphy, automatic	Feb. 7, 1893
491,347	Gray, E.	do	Feb. 7, 1893
494,562	Gray, E.	do	Apr. 4, 1893
478,591	Gray, J.	Electric locomotives	July 12, 1892
479,360	Green, H.	Lights, incandescent	July 19, 1892

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483,739	Green, C	Lighting, systems	Oct. 4, 1892
495,467	Green, H	Lights, incandescent	Apr. 11, 1893
490,626	Green, I. L	Railway signals, cab, sectional rail	Jan. 24, 1893
480,011	Green, J. J	Insulators	Aug. 2, 1892
484,911	Green, J. J	Ceiling blocks	Oct. 25, 1892
489,677	Greenwood, J	Electrolysis, aqueous bath, chemicals	Jan. 10, 1893
496,648	Gregory, F. L	Electro-magnets	May 2, 1893
498,932	Griffiths, J. R	Railways, systems, overhead, trolley	June 6, 1893
498,933	Griffiths, J. R	do	June 6, 1893
487,834	Griscom, W. W	Batteries, secondary	Dec. 13, 1892
483,718	Gross, F	Telephones, details	Oct. 4, 1892
489,000	Groszith, H. and Ashley, R	Magneto-electric	Jan. 3, 1893
482,171	Guaso, A. F. and Chusin, A	Indicators	Sept. 6, 1892
482,902	Guerrant, G. M	Applications, general	Sept. 20, 1892
483,285	Guilleaum, T	Conductors	Sept. 27, 1892
486,333	Guilley, A. H. R	Railways, conductor supports and insulators	Nov. 15, 1892
488,889	Guthberlet, E. T. and Isard, W. R	Igniting devices, manual	Dec. 27, 1892
484,959	Gutmann, L	Induction coils	Oct. 25, 1892
479,802	Haesler, F. J	Magneto-electric	Aug. 2, 1892
492,011	Haight, H. J	Annunciators, step-by-step	Feb. 21, 1893
496,258	Hain, H. C	Time alarms	Apr. 25, 1893
482,306	Hall, C. K	Telegraphy, railway car	Sept. 6, 1892
491,553	Hall, E. J	Telephones, systems, divided central	Feb. 14, 1893
495,087	Hall, E. J	Telephones, systems	Apr. 11, 1893
494,199	Hall, T. G	Batteries, thermal	Mar. 28, 1893
492,482	Hall, E. F. and Pickernell, F. A	Telephones, systems	Feb. 28, 1893
492,483	Hall, E. F. and Pickernell, F. A	do	Feb. 28, 1893
486,334	Hall, G. W. and De Marr, J. J	Lights, sockets and keys	Nov. 15, 1892
491,682	Halvorson, C. A. B	Lights, incandescent, special features	Feb. 14, 1893
482,172	Hamilton, J. E	Igniting devices, manual	Sept. 6, 1892
497,293	Hamlin, H. A	Railways, conductor supports and insulators	May 9, 1893
493,380	Hammarström, E. F	Cut-outs, thermal	Mar. 14, 1893
499,921	Hammond, F	Knitting and netting, stopping	June 20, 1893
496,409	Hansen, F	Lights, arc, gravity feed, gear-clutch	May 2, 1893
490,280	Hansen, J. W	Motors	Jan. 24, 1893
485,379	Hard, J. R	Bells	Nov. 1, 1892
492,519	Hard, J. R	Annunciators, drop	Feb. 28, 1893
492,200	Harper, H	Lights, arc, gravity feed	Feb. 21, 1893
492,201	Harper, H	do	Feb. 21, 1893
481,025	Harrington, W. E	Connectors	Aug. 16, 1892
487,069	Harrington, W. E	Machine elements, gearing, belt	Nov. 29, 1892
487,070	Harrington, W. E	do	Nov. 29, 1892
488,654	Harris, F	Railway signals	Dec. 27, 1892
489,186	Harris, G. W	Batteries, secondary	Jan. 3, 1893
491,210	Harris, S	Railways, systems, overhead, trolley	Feb. 7, 1893
490,248	Harris, T	Railways, systems, closed conduit	Jan. 17, 1893
493,623	Harris, T	do	Mar. 14, 1893
499,108	Harrison, E. M	Telephones, electric	June 6, 1893
483,198	Hart, W. H	Conductors, underground	Dec. 20, 1892
493,997	Harteluis, C. E	Medical and surgical, exercising apparatus	Mar. 21, 1893
499,425	Haskins, C. D	Cut-outs, thermal	June 13, 1893
497,123	Hassan, M. W	Magneto-electric	May 9, 1893
497,495	Hassan, M. W	Railways, systems, overhead	May 16, 1893
493,025	Hassler, R. H	Magneto-electric	Mar. 17, 1893
479,804	Hatch, E. B. and Colton, C. A	Electro-magnets	Aug. 2, 1892
478,104	Hathaway, M. H	Magneto-electric	July 5, 1892
493,713	Hathaway, M. H. and Kelleher, J	Railways, conductor supports and insulators	Mar. 21, 1893
490,560	Hauty, A. J	Insulators	Jan. 24, 1893
487,735	Hayden, J. W	Railways, systems, conduit	Dec. 13, 1892
500,284	Hayden, M. M	Batteries, galvanic	June 27, 1893
490,597	Hayden, R	Railways, systems, closed conduit	Jan. 24, 1893
484,199	Hayes, J. A	Lights, arc, gravity feed, clutch	Oct. 11, 1892
492,467	Haynes, C. M	Telephones, relays and repeaters	Feb. 28, 1893
487,219	Hayes, H. V. and Richards, W. L	Telephones, magnetic	Nov. 29, 1892
487,220	Hazeltine, C. W	Lights, filaments and carbons	Nov. 29, 1892
493,716	Hazelton, E	Railways, systems, closed conduit	Mar. 21, 1893
493,212	Head, F. E	Railways, conductor supports and insulators	Mar. 7, 1893
479,743	Headly, C. B. and Carrow, J. S	Ornamentation, glass	July 26, 1892
495,035	Heath, F	Railways, systems, overhead, trolley	Apr. 11, 1893
498,915	Heinmann, S	Lights, filaments and carbons	June 6, 1893
493,926	Henneberg, H. O	Telegraphy, lightning arresters	Mar. 21, 1893
493,089	Henry, J. C	Electric locomotives	Mar. 7, 1893
494,477	Henry, J. C	Railways, systems, closed circuits	Mar. 28, 1893
494,479	Henry, J. C	Electric locomotives	Mar. 28, 1893
499,112	Henry, J. C	Railways, systems, overhead	June 6, 1893
499,543	Henry, J. C	Motors	June 13, 1893
499,544	Henry, J. C	Regulators	June 13, 1893

No.	NAME.	CLASS.	DATE.
499,633	Henry, J. C.	Gearing	June 13, 1893
500,065	Henry, J. C.	Railways, systems, closed conduit	June 20, 1893
500,066	Henry, J. C.	Electric locomotives	June 20, 1893
500,067	Henry, J. C.	do	June 20, 1893
500,068	Henry, J. C.	Railways, systems, converter	June 20, 1893
500,070	Henry, J. C.	Railways, systems, overhead, trolley	June 20, 1893
482,126	Henry, J. M. and Wilson, R. B.	Telegraphy, railway car	Sept. 6, 1892
489,739	Henry, L. and Dalysson, L. N.	Lights, sockets and keys	Jan. 10, 1893
479,941	Henry, W.	Friction generators	Aug. 2, 1892
496,307	Heinze, J. O., jr.	Magneto-electric	Apr. 25, 1893
496,308	Heinze, J. O., jr.	Cut-outs, thermal	Apr. 25, 1893
496,309	Heinze, J. O., jr.	Galvanometers	Apr. 25, 1893
492,398	Heiser, A.	Railways, systems, closed conduit	Feb. 28, 1893
493,718	Hellebrandt, S.	Magneto-electric	Mar. 21, 1893
496,652	Hemingray, R. G. and Gill, J. C.	Insulators	May 2, 1893
496,517	Hensel, R. T. E.	Batteries, secondary	May 2, 1893
492,160	Herdman, F. E.	Elevators	Feb. 21, 1893
480,845	Herdman, F. E.	do	Aug. 16, 1892
480,846	Herdman, F. E.	do	Aug. 16, 1892
489,709	Hering, C.	Transmission of power	Jan. 10, 1893
486,612	Hewitt, W. R.	Telegraphy, fire, engine house apparatus	Nov. 22, 1892
482,251	Heyser, E. A.	Time checks	Sept. 6, 1892
482,174	Hibbard, A. S.	Telephones, divided central	Sept. 6, 1892
479,187	Hicks, T. II.	Motors, alternating	July 19, 1892
491,106	Hicks, T. H.	Magneto-electric	Feb. 7, 1893
492,355	Hicks, T. H.	do	Feb. 21, 1893
479,327	Hieatzman, A. H.	Railways, systems, conduit	July 19, 1892
498,169	Hieatzman, A. H.	do	May 23, 1893
486,377	Higham, D.	Lights, arc, gravity feed, clutch	Nov. 15, 1892
484,964	Hills, L.	Lights, arc, special features	Oct. 25, 1892
495,552	Hills, L.	Insulators	Apr. 18, 1893
498,269	Hills, L.	Lights, arc, positive feed, gear-clutch	May 30, 1893
494,565	Hill, W. S.	Motors, hand operating devices	Apr. 4, 1893
494,781	Hill, W. S.	do	Apr. 4, 1893
495,038	Hill, W. S.	Cut-outs, thermal	Apr. 11, 1893
488,811	Hirt, L. J.	Railways, systems, overhead, trolley	Dec. 27, 1892
489,005	Hiss, N.	Indicators	Jan. 3, 1893
492,681	Hoare, G.	Magneto-electric	Feb. 28, 1893
500,539	Hodgkinson, T. C.	Medical and surgical; electrodes	June 27, 1893
483,096	Hoffman, J. W.	Batteries, galvanic	Oct. 11, 1892
496,567	Hoffmann, C. H.	Pulleys and shafting, belt tighteners	May 2, 1893
483,151	Hoggson, S. H.	Printing, hand stamps	Sept. 27, 1892
491,426	Holcombe, J. H. L.	Lighting, systems	Feb. 7, 1893
491,109	Holman, S. W.	Conductors, anti-inductive	Feb. 7, 1893
496,224	Holman, S. W.	Telephones, magnetic	Apr. 25, 1893
482,177	Holmes, P. H.	Lights, filaments and carbons	Sept. 6, 1892
483,556	Holt, H. L.	Lumps and gas fittings, harps and hangers	Oct. 4, 1892
495,587	Holt, C. F.	Measuring instruments, ships' logs	Apr. 18, 1893
498,550	Holtum, A.	Telegraphy, circuit closers	May 30, 1893
496,878	Holtzer, C. W.	Batteries, galvanic	May 9, 1893
483,844	Hopkins, N. M.	Alarms, burglar	Oct. 4, 1892
483,689	Hoppers, J. J.	Railways, systems, overhead, trolley	Oct. 4, 1892
499,115	Hooper, G. W.	do	June 6, 1893
493,723	Horton, W. P., jr.	Dental instruments	Mar. 21, 1893
489,485	Hotchkiss, Z. P.	Telegraphy, automatic	Jan. 3, 1893
483,061	Hough, J. C.	Railways, systems, overhead, trolley	Sept. 20, 1892
488,121	Houghton, E. J. and White, W.	Regulators	Dec. 13, 1892
492,291	Houghton, E. J. and White, W.	Magneto-electric	Feb. 21, 1893
496,688	Houghton, S. C.	Measuring instruments, fare registers	May 2, 1893
481,030	Howard, H.	Heating, metal working	Aug. 16, 1892
484,535	Howard, F. H.	Electrolysis, aqueous bath, depolarizing bur- nishing.	Oct. 18, 1892
480,947	Howell, J. W.	Galvanometers	Aug. 16, 1892
499,737	Howland, R. S.	Clocks, electric	June 20, 1893
497,448	Hoyt, A. H.	Galvanometers	May 16, 1893
497,449	Hoyt, A. H.	do	May 16, 1893
497,521	Hoyt, A. H.	do	May 16, 1893
497,522	Hoyt, A. H.	do	May 16, 1893
500,264	Hoyt, A. H.	do	June 27, 1893
481,904	Huber, E.	Lighting, systems	Aug. 30, 1892
494,832	Hublele, H.	Clocks, electric	Apr. 4, 1893
495,676	Hudson, T.	Lights, incandescent, special features	Apr. 18, 1893
486,338	Hull, H. A.	Alarms, burglar	Nov. 15, 1892
480,099	Hull, W. S.	do	Aug. 2, 1892
480,100	Hull, W. S.	do	Aug. 2, 1892
483,806	Hull, W. S.	Insulators	Oct. 4, 1892
494,923	Hull, W. S.	Alarms, burglar	Apr. 4, 1893

No.	NAME.	CLASS.	DATE.
494,924	Hull, W. S	Iron structures, jails	Apr. 4, 1893
489,902	Hull, W. S	Alarms, burglar	Jan. 10, 1893
499,428	Hull, W. S	do	June 13, 1893
492,512	Hum, E. K	Conductors, lightning-rods	Feb. 28, 1893
492,019	Humans, W	Telephones, switches	Feb. 21, 1893
489,815	Hume, C. S	Drop light, spring drum	Jan. 10, 1893
491,560	Hummel, G	Meters	Feb. 14, 1893
484,796	Hunter, G. E	Watch balances	Oct. 25, 1892
484,637	Hunter, J. H	Tempering and annealing, application of electricity.	Oct. 18, 1892
484,205	Hunter, J. H. and Lucock, J. S	Railway signals	Oct. 11, 1892
478,510	Hunter, R. M	Lights, arc, positive feed, gear-clutch	July 5, 1892
480,850	Hunter, R. M	Railways, systems, closed conduit	Aug. 16, 1892
481,905	Hunter, R. M	Railways, systems, conduit	Aug. 30, 1892
482,964	Hunter, R. M	do	Sept. 20, 1892
483,494	Hunter, R. M	Railways, systems, overhead	Sept. 27, 1892
499,676	Hunter, R. M	Lights, arc, gravity feed, clutch	June 13, 1893
492,888	Hunter, R. M	Magneto-electric	Mar. 7, 1893
493,359	Hunter, R. M	Lights, arc, special features	Mar. 14, 1893
493,360	Hunter, R. M	Lights, arc, gravity feed, clutch	Mar. 14, 1893
494,705	Hunter, R. M	Electric locomotives	Apr. 4, 1893
495,461	Hunter, R. M	Lights, arc, special features	Apr. 11, 1893
496,312	Hunter, R. M	Galvanometers	Apr. 25, 1893
497,024	Hunter, R. M	Railways, systems, circuits, multiple arc	May 9, 1893
497,025	Hunter, R. M	Railways, systems, overhead	May 9, 1893
497,450	Hunter, R. M	Lights, arc, gravity feed, clutch	May 16, 1893
498,435	Hunter, R. M	Railways, systems, overhead, trolley	May 30, 1893
499,167	Hunter, R. M	Railways, systems, overhead	June 6, 1893
499,461	Hunter, R. M	do	June 13, 1893
500,132	Hunter, R. M	Motors	June 27, 1893
492,366	Hurd, C. G	Telegraphy, fire, alarms and extinguishers	Mar. 7, 1893
496,611	Hutchins, A. E	Lighting, systems	May 2, 1893
480,948	Hutchinson, J	Cut-outs, mechanical	Aug. 16, 1892
488,205	Hutchinson, J	Lights, sockets and keys	Dec. 20, 1892
490,477	Hutchinson, J	Cut-outs, thermal	Jan. 24, 1893
491,561	Hutchinson, J	Lights, sockets and keys	Feb. 14, 1893
493,868	Hutchinson, J	Lights, incandescent, special features	Mar. 21, 1893
484,797	Hyatt, J. W	Watch balances	Oct. 25, 1892
479,596	Iden, C. W	Batteries, thermal	July 26, 1892
489,161	Illig, H	Meters	Jan. 3, 1893
486,715	Imlay, W. L	Mills, ore and coal washers	Nov. 22, 1892
491,483	Immisch, M	Motors	Feb. 7, 1893
493,361	Immisch, M	do	Mar. 14, 1893
479,216	Ingmanson, J. and Lorang, R	Railways, conductor supports and insulators	July 19, 1892
479,121	Irish, W. E	Lights, arc, gravity feed, clutch	July 19, 1892
479,510	Irish, W. E	Lights, arc, positive feed, clutch	July 26, 1892
492,807	Irish, D. and Williams, J. G	Electro-magnets	Mar. 7, 1893
496,658	Irving, F. K	Batteries, galvanic	May 2, 1893
487,329	Jackson, C. A	Electric locomotives	Dec. 6, 1892
487,744	Jacob, A. P	Gas lighting attachments	Dec. 13, 1892
478,865	Jacobi, J	Time alarms	July 12, 1892
485,279	Jacques, W. W	Telegraphy, circuits and systems	Nov. 1, 1892
490,353	James, W. G	Alarms, burglar	Jan. 24, 1893
484,206	James, W. H	Telegraphy, fire	Oct. 11, 1892
485,347	Jappy, H. and Helmer, O	Lights, arc, gravity feed, gear-clutch	Nov. 1, 1892
491,707	Jefferson, C. W	Conductors, underground	Feb. 14, 1893
491,708	Jefferson, C. W	Magneto-electric	Feb. 14, 1893
489,481	Jenkins, E. H	Railways, systems, overhead, trolley	Jan. 10, 1893
492,808	Jenkins, N	Lights, incandescent, special features	Mar. 7, 1893
491,484	Jenkins, S. B	Heaters	Feb. 7, 1893
497,790	Jenkins, S. B	do	May 23, 1893
497,791	Jenkins, S. B	do	May 23, 1893
497,792	Jenkins, S. B	do	May 23, 1893
497,793	Jenkins, S. B	do	May 23, 1893
497,794	Jenkins, S. B	do	May 23, 1893
497,795	Jenkins, S. B	do	May 23, 1893
481,401	Jenkins, W. F	Railways, systems, conduit	Aug. 23, 1892
481,402	Jenkins, W. F	do	Aug. 23, 1892
481,403	Jenkins, W. F	do	Aug. 23, 1892
488,502	Jennings, C. C	Telephones, systems	Dec. 20, 1892
500,135	Jones, C. S	Motors	June 27, 1893
497,963	Johnson, A. L	Nut and bolt locks, side	May 23, 1893
479,809	Johnson, E. H	Railways, systems, closed conduit	Aug. 2, 1892
483,654	Johnson, H. T	Batteries, galvanic	Oct. 4, 1892
487,839	Johnson, H. T	do	Dec. 13, 1892
487,185	Johnson, J. H	Medical and surgical, body-wear	Nov. 29, 1892
491,890	Johnston, A. L	Insulators	Feb. 14, 1893

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487,275	Johnston, F. L. and Fletcher, W. C.	Speed measures	Dec. 6, 1892
487,745	Johnston, W. C.	Motors, mechanical, spring	Dec. 13, 1892
484,553	Jones, L. L.	Lights, filaments and carbons	Oct. 18, 1892
488,940	Jones, F. W.	Telegraphy, repeaters	Dec. 27, 1892
494,958	Jordan, C. M.	Surgery, ear	Apr. 4, 1893
497,408	Jordan, W. H.	Railway signals, sectional rail	May 16, 1893
497,377	Just, P. C.	Railways, systems, conduit	May 16, 1893
492,330	Kamsler, J.	Alarms, burglar	Feb. 21, 1893
488,123	Keating, H. S.	Cut-outs, thermal	Dec. 13, 1892
492,301	Keckeley, W. H.	Conductors	Feb. 21, 1893
489,150	Keil, A.	Safety lamps and lanterns	Jan. 3, 1893
479,282	Keith, R. D.	Alarms	July 19, 1892
479,246	Kelley, J. F. and Stanley, W., jr	Motors, alternating	July 26, 1892
493,431	Keller, J.	Dental instruments	Mar. 14, 1893
482,181	Kellom, C. F.	Connectors	Sept. 6, 1892
479,814	Kennedy, R.	Heaters	Aug. 2, 1892
482,043	Kennedy, P. and Diss, C. J.	Batteries, secondary	Sept. 6, 1892
482,044	Kennedy, P. and Thorp, C. J.	do	Sept. 6, 1892
479,167	Kennelly, A. E.	Meters	July 19, 1892
479,168	Kennelly, A. E. and Olt, J. F.	Galvanometers	July 19, 1892
479,169	Kennelly, A. E. and Olt, J. F.	Magneto-electric	July 19, 1892
500,236	Kennelly, A. E.	Galvanometers	June 27, 1893
492,497	Kenyon, W. H.	Railway signals, block	Feb. 28, 1893
496,659	Kerr, R. C. and Hardmann, P.	Telegraphy, circuit closers, thermal	May 2, 1893
482,253	Kester, J. T.	Lights, arc, gravity feed, clutch	Sept. 6, 1892
488,012	Kilbourn, L. M. and Van Etten, S.	Igniting devices, automatic	Dec. 13, 1892
479,761	Kilbourn, W. H.	Valve controllers	July 26, 1892
489,563	Kimball, D. E.	Railways, systems, closed conduit	Jan. 10, 1893
481,956	Kimball, G. A.	Railways, systems, overhead, trolley	Sept. 6, 1892
494,337	King, J.	Telegraphy, circuit closers	Mar. 28, 1893
500,394	King, F. and Clarke, E.	Batteries, secondary	June 27, 1893
486,477	Kinsman, F. E.	Railways, conductor supports and insulators	Nov. 22, 1892
487,752	Kinsman, F. E.	Railway signals, cab, sectional rail	Dec. 13, 1892
492,402	Kinsman, F. E.	do	Feb. 28, 1893
492,403	Kinsman, F. E.	do	Feb. 28, 1893
491,893	Kinsman, J. H.	Telephones, calls, step-by-step	Feb. 14, 1893
492,627	Kintner, C. J.	Alarms	Feb. 28, 1893
498,852	Kintner, C. J.	Railways, systems, closed conduit	June 6, 1893
485,744	Kirkegaard, G.	Lights, arc, gravity feed, gear-clutch	Nov. 8, 1892
500,285	Kirnan, W. H.	Telegraphy, fire, variable signal, dial	June 27, 1893
492,811	Kissinger, W. S.	Connectors	Mar. 7, 1893
488,913	Kjorstad, O.	Medical and surgical, body-wear	Dec. 13, 1892
484,207	Klein, C. J.	Lights, sockets and keys	Oct. 11, 1892
495,046	Knoche, A.	Motors, reciprocating	Apr. 11, 1893
495,047	Knowles, C. V.	Indicators	Apr. 11, 1893
480,266	Knowles, E. R.	Batteries, secondary	Aug. 9, 1892
482,012	Knowles, E. R.	do	Sept. 6, 1892
482,979	Knowles, E. R.	do	Sept. 20, 1892
483,562	Knowles, E. R.	do	Oct. 4, 1892
483,563	Knowles, E. R.	do	Oct. 4, 1892
485,327	Knowles, E. R.	Lights, arc, gravity feed, gear-clutch	Nov. 1, 1892
498,799	Knowles, E. R.	Rheostats	June 6, 1893
491,361	Kochs, B. and A.	Railways, systems, overhead, trolley	Feb. 7, 1893
495,136	Koch, K.	Magneto-electric	Apr. 11, 1893
495,940	Koedding, W.	do	Apr. 18, 1893
495,941	Koedding, W.	do	Apr. 18, 1893
494,961	Koepoel, A.	Galvanometers	Apr. 4, 1893
496,690	Kolbe, H. F.	Bells	May 2, 1893
480,727	Kolben, E.	Magneto-electric	Aug. 16, 1892
480,728	Kolben, E.	do	Aug. 16, 1892
491,567	Kolben, E.	do	Feb. 14, 1893
491,568	Kolben, E.	do	Feb. 14, 1893
496,228	Koller, H.	Batteries, galvanic	Apr. 25, 1893
483,564	Korsmeyer, E. H.	Printing, oscillating	Oct. 4, 1892
496,519	Krumscheid, P.	Fire alarms	May 2, 1893
488,611	Krogh, F. C. C.	Telegraphy, circuit closers, thermal	Dec. 27, 1892
497,800	Krogh, E. C. C.	do	May 23, 1893
479,886	Krotz, A. S.	Regulators	Aug. 2, 1892
496,882	Krueger, M.	Lights, arc, positive feed, clutch	May 9, 1893
487,904	Krulus, Z.	Railway signals, track instruments	Dec. 13, 1892
490,479	Kruschke, R. C.	Alarms, burglar	Jan. 24, 1893
490,663	La Burt, J.	Railway signals, cab, sectional rail	Jan. 31, 1893
494,007	La Burt, J.	do	Mar. 21, 1893
489,312	La France, E.	Telegraphy, circuit closers, thermal	Jan. 3, 1893
486,585	Lain, D. E.	Railways, conductor supports and insulators	Nov. 22, 1892
488,016	Lamme, B. G.	Magneto-electric	Dec. 13, 1892
491,362	Lane, A. R.	Insulators	Feb. 7, 1893

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495,463	Lane, G. M.	Lights, filaments and carbons	Apr. 11, 1893
480,729	Lane, T. W.	Annunciators, drop	Aug. 16, 1892
489,653	Lane, T. W.	Igniting devices, manual	Jan. 10, 1893
499,297	Lane, T. W. and Lee, C. E.	do	June 13, 1893
499,298	Lane, T. W. and Lee, C. E.	do	June 13, 1893
500,400	Lange, P.	Motors	June 27, 1893
494,871	Langheinz, E. L.	Railways, systems, overhead, trolley	Apr. 4, 1893
492,215	Larkins, S. O.	Lights, incandescent, special features	Feb. 21, 1893
481,573	La Roche, F. A.	Galvanometers	Aug. 30, 1892
496,126	La Roche, F. A.	Batteries, secondary	Apr. 25, 1893
486,047	Lattig, J. W.	Railway signals, sectional rail	Nov. 8, 1892
492,689	Lattig, J. W.	Telegraphy, relays and sounders	Feb. 28, 1893
496,786	Lattig, J. W.	Railway signals, sectional rail	May 2, 1893
496,787	Lattig, J. W.	do	May 2, 1893
499,125	Lattig, J. W.	do	June 6, 1893
499,126	Lattig, J. W.	do	June 6, 1893
481,093	Lawrence, H. W.	Rheostats	Sept. 6, 1892
481,959	Lawrence, R.	Railways, systems, conduit	Sept. 6, 1892
487,846	Lean, G. R. and Burleigh, C. B.	Lights, sockets and keys	Dec. 13, 1892
490,292	Leavy, M.	Cut-outs, thermal	Jan. 24, 1893
482,872	Lee, C. T.	Insulators	Sept. 20, 1892
485,105	Lee, C. T.	Railways, conductor supports and insulators	Oct. 25, 1892
485,106	Eee, C. T.	do	Oct. 25, 1892
498,558	Lee, T.	Conveyers	May 30, 1893
483,692	Lehman, A. J.	Batteries, galvanic	Oct. 4, 1892
486,212	Leland, H. W.	Alarms, burglar	Nov. 15, 1892
497,430	Leland, H. W.	do	May 16, 1893
479,170	Lemp, H.	Regulators, alternating	July 19, 1892
493,629	Lemp, H. and Wightmann, M. J.	Cut-outs, thermal	Mar. 21, 1892
478,344	Lenard, H. W.	Transmission of power	July 5, 1892
484,208	Leonard, H. W.	Lighting, systems, car	Oct. 11, 1892
495,744	Levi, J.	Telegraphy, circuits and systems	Apr. 18, 1893
485,767	Lewis, A. D.	Printing, autographic	Nov. 8, 1892
498,519	Lewis, A. D. and Witherell, S.	Printing, stencil making pens	May 30, 1893
487,369	Lewis, E. C.	Telephones, supports	Dec. 6, 1892
500,144	Libbey, S. H.	Magneto-electric	June 27, 1893
482,015	Lillard, G. T. and Erhard, W.	Telegraphy, printing	Sept. 6, 1892
487,332	Lindahl, H.	Railways, conductor supports and insulators	Dec. 6, 1892
480,409	Lineoff, A. L.	Railways, systems, closed conduit	Aug. 9, 1892
495,225	Lintner, G. A.	Galvanometers	Apr. 11, 1893
480,369	Linville, S. R.	Lighting, systems	Aug. 9, 1892
484,209	Locke, F. M.	Insulators	Oct. 11, 1892
493,434	Locke, F. M.	do	Mar. 14, 1893
479,007	Logan, M. S.	Lights, arc, gravity feed, gear-clutch	July 19, 1892
479,138	Loomis, F. F.	Railway signals, sectional rail	July 19, 1892
479,943	Loomis, F. F.	Motors, reciprocating	Aug. 2, 1892
479,949	Loomis, F. F.	Cut-outs, mechanical, rotary	Aug. 2, 1892
479,950	Loomis, F. F.	Annunciators, step-by-step	Aug. 2, 1892
498,355	Lord, C. A.	Railways, systems, overhead, trolley	May 30, 1893
488,441	Lothrop, G. H.	Railways, automatic	Dec. 20, 1892
481,114	Lott, W. F.	Telegraphy, keys	Aug. 16, 1892
490,028	Love, J. C.	Railways, systems, overhead, trolley	Jan. 17, 1893
500,403	Loveridge, F. H.	Magneto-electric	June 27, 1893
486,879	Lovett, T. J.	Separators	Nov. 29, 1892
487,073	Lovett, T. J.	do	Nov. 29, 1892
487,074	Lovett, T. J.	do	Nov. 29, 1892
483,231	Loy, I. W. and O'Toole, R.	Railway signals, track instruments	Sept. 27, 1892
492,036	Lozier, R. T.	Regulators	Feb. 21, 1893
500,404	Luce, W. B.	Galvanometers	June 27, 1893
482,129	Ludwig, D. J.	Telegraphy, relays and sounders	Sept. 6, 1892
479,821	Lundberg, A. P.	Cut-outs, mechanical, rotary	Aug. 2, 1892
481,701	Lundell, R.	Motors	Aug. 30, 1892
486,213	Lundell, R.	Motors, hand operating devices	Nov. 15, 1892
486,214	Lundell, R.	Regulators	Nov. 15, 1892
486,215	Lundell, R.	Cut-outs, mechanical, rotary	Nov. 15, 1892
487,755	Lundell, R.	Magneto-electric	Dec. 13, 1892
490,449	Lundell, R.	Motors	Jan. 24, 1893
490,809	Lundell, R.	Magneto-electric	Jan. 31, 1893
490,810	Lundell, R.	do	Jan. 31, 1893
483,567	Lyman, A. B.	Annunciators, drop systems	Dec. 27, 1892
492,219	Lyman, A. B.	Telegraphy, lightning arresters	Feb. 21, 1893
488,522	Lyon, I. W.	Telephones, switch-boards	Dec. 20, 1892
479,520	Mackellar, M. and Weaver, G. D.	Clocks, electric	July 26, 1892
491,726	Macleod, W. A.	Magneto-electric	Feb. 14, 1893
479,374	Mahannah, F.	Till locks	July 19, 1892
480,470	Maier, J.	Street light hangers	Aug. 9, 1892
482,374	Mailloux, C. O.	Cut-outs, electro-magnetic	Sept. 13, 1892

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491,713	Main, W	Lights, incandescent, special features	Feb. 14, 1893
500,022	Moakler, J. W	Electric locomotives	June 20, 1893
496,060	Manderfield, G. J	Knitting and netting, stopping	Apr. 25, 1893
494,278	Manger, F. W. and Huebel, O. H	Bells	Mar. 28, 1893
478,515	Mann, J. J	Lace looped fabrics	July 5, 1892
481,364	Manton, H. L	Indicators, rotary	Aug. 23, 1892
478,346	Mansfield, F	Railways, systems, closed conduit	July 5, 1892
488,738	Mansfield, F	do	Dec. 27, 1892
498,280	Manuel, M	Station indicators	May 30, 1893
497,585	Martin, A. J	Railways, systems, closed conduit	May 16, 1893
479,715	Martin, M	Telegraphy, fire	July 26, 1892
487,676	Martin, M	Telegraphy, fire, variable signal, dial	Dec. 6, 1892
494,279	Martin, M	Telegraphy, fire	Mar. 28, 1893
497,281	Martin, M	Telegraphy, automatic	May 9, 1893
497,923	Martin, M	Telegraphy, circuit closers, thermal	May 23, 1893
486,051	Maret, J. and De Graff, W. L	Telegraphy, relays and sounders	Nov. 8, 1892
483,074	Marsh, J. W	Conductors	Sept. 20, 1892
494,721	Martyn, E	Railways, systems, overhead, trolley	Apr. 4, 1893
479,951	Marvin, H. N	Transmission of power	Aug. 2, 1892
498,560	Mashinter, W. P	Cut-outs, thermal	May 30, 1893
488,022	Mason, D	Railways, systems, overhead, trolley	Dec. 13, 1892
488,023	Mason, D	do	Dec. 13, 1892
496,522	Mason, D	Motors, hand operating devices	May 2, 1893
500,341	Mathiesen, W	Lights, arc, gravity feed, gear-clutch	June 27, 1893
479,825	Mattison, J. D	Velocipedes	Aug. 2, 1892
482,440	Maver, W., jr	Telegraphy, relays and sounders	Sept. 13, 1892
478,701	Maxim, H. F. and Price, J. M	Telegraphy, circuit closers, thermal	July 12, 1892
489,259	Maxim, H. F. and Price, J. M	Thermometers	Jan. 3, 1893
485,645	McAulis, J. D. and Fleming, H. E	Clocks, electric	Nov. 8, 1892
498,808	McBerty, F. R	Annunciators, drop	June 6, 1893
485,473	McCart, J. and Judkins, A. G	Railway signals, cab, sectional rail	Nov. 1, 1892
478,518	McCarthy, L	Railways, conductor supports and insulators	July 5, 1892
490,302	McCarthy, L	Insulators	Jan. 24, 1893
489,658	McCarthy, L	do	Jan. 10, 1893
491,729	McCarthy, L	do	Feb. 14, 1893
498,289	McCaskey, A. S	Telegraphy, printing	May 30, 1893
498,290	McCaskey, A. S	Railway signals, block systems	May 30, 1893
498,291	McCaskey, A. S	Telephones, systems, automatic	May 30, 1893
480,475	McClaren, A. E	Telegraphy, keys	Aug. 9, 1892
499,748	McClaren, A. E	Telephones, systems, automatic	June 20, 1893
485,351	McClellan, C. W	Telegraphy, fire	Nov. 1, 1892
487,852	McCullough, A. H	Telephones, systems, multiple switch-board	Dec. 13, 1892
487,631	McDermott, G. L	Alarms	Dec. 6, 1892
485,876	McDonough, J. W	Telephones, electric	Nov. 8, 1892
484,110	McElroy, J. F	Lighting, systems	Oct. 11, 1892
486,643	McElroy, J. F	Systems of distribution	Nov. 22, 1892
486,644	McElroy, J. F	Regulators	Nov. 22, 1892
499,363	McElroy, J. F	Cut-outs, mechanical, rotary	June 13, 1893
500,288	McElroy, J. F	Heaters	June 27, 1893
492,815	McFadden, G. K	Lights, arc, gravity feed, clutch	Mar. 7, 1893
478,204	McGinsey, C. R	Signs, illuminated, advertising	July 5, 1892
500,506	McGregor, J. A. K	Railways, systems, closed conduit	June 27, 1893
497,411	McGregory, F. S	Telegraphy, circuit closers	May 16, 1893
485,352	McIntosh, G	Alarms	Nov. 1, 1892
485,287	McKay, W. H	Lighting, systems	Nov. 1, 1892
490,081	McLaughlin, J. F	Magneto-electric	Jan. 17, 1893
490,082	McLaughlin, J. F	Heaters	Jan. 17, 1893
491,124	McLaughlin, J.	Lights, arc, special features	Feb. 7, 1893
492,422	McLaughlin, J. F	Batteries, secondary	Feb. 28, 1893
493,109	McLaughlin, J. F	Lights, sockets and keys	Mar. 7, 1893
497,878	McLaughlin, J. F	Magneto-electric	May 23, 1893
497,888	McLaughlin, J. F	do	May 23, 1893
495,138	McLeod, J. N	Magneto-electric, hand machines	Apr. 11, 1893
495,139	McLeod, J. N	do	Apr. 11, 1893
483,235	McMunn, L. D	Cut-outs, mechanical, sliding	Sept. 27, 1892
492,694	McMurray, J., jr	Annunciators, time	Feb. 28, 1893
487,853	McQuarrie, A. H	Telephones, systems, multiple switch-board, test.	Dec. 13, 1892
487,854	McQuarrie, J. L	do	Dec. 13, 1892
492,484	McQuarrie, J. L	do	Feb. 28, 1893
481,047	McQuat, E	Lights, incandescent	Aug. 16, 1892
478,629	McTighe, T. J	Conductors	July 12, 1892
480,201	Meadows, C. A	Lamps and gas fittings, side reflectors	Aug. 2, 1892
494,786	Mehren, J. F	Telegraphy, fire	Apr. 4, 1893
494,787	Mehren, J. F	do	Apr. 4, 1893
497,755	Meissner, W	Lighting, systems	May 16, 1893
486,488	Meissner, W. O	Lights, arc, positive feed, gear-clutch	Nov. 22, 1892

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480,954	Melick, G. F	Lights, incandescent	Aug. 16, 1892
481,503	Merkins, J. S	Railways, systems, overhead, trolley	Aug. 23, 1892
481,042	Merritt, G	Telegraphy, railway car	Aug. 16, 1892
489,682	Metzger, A	Lights, sockets and keys	Jan. 10, 1893
489,972	Miller, A. C	Car brakes	Jan. 17, 1893
486,729	Miller, C. E	Lamps and gas fittings, side reflectors	Nov. 22, 1892
493,935	Miller, H. V. and A. C	Railway signals, cab, sectional rail	Mar. 21, 1893
479,139	Miller, J. J	Lights, incandescent, special features	July 19, 1892
494,111	Miller, S. W., A. C. and H. V	Railway signals, cab, sectional rail	Mar. 21, 1893
491,580	Milligan, C. J	Alarms	Feb. 14, 1893
490,297	Miner, H. A	Railways, systems, overhead	Jan. 24, 1893
489,315	Michel, A. M	Batteries, secondary	Jan. 3, 1893
490,975	Mitchell, E. W	Railways, systems, closed conduit	Jan. 31, 1893
478,201	Mitchell, W	Heating, soldering	July 5, 1892
487,285	Mitchell, W	Heaters	Dec. 6, 1892
491,437	Mitchell, W	Heating, metal working	Feb. 7, 1893
491,438	Mitchell, W	do	Feb. 7, 1893
494,555	Mitchell, W	Furnaces, electric	Apr. 4, 1893
494,556	Mitchell, W	do	Apr. 4, 1893
495,135	Moffett, G. F	Railways, systems, conduit	May 23, 1893
496,332	Moore, C. E	Motors, hand operating devices	Apr. 25, 1893
496,366	Moore, D. McF. and Jacobs, C. M	Lighting, systems	Apr. 25, 1893
482,263	Moore, E. D	Annunciators, drop	Sept. 6, 1892
494,531	Moore, McF. D	Lights, incandescent	Mar. 28, 1893
485,643	Moore, J. J. and Henry, D. A	Telephones, switch-boards	Nov. 8, 1892
499,305	Moore, J. L	Bells	June 13, 1893
493,104	Mordey, W. M	Magneto-electric	Mar. 7, 1893
500,026	Morey, C. L	Lighting, systems	June 20, 1893
490,034	Morford, T. E	Conductors	Jan. 17, 1893
491,490	Morford, T. E	Magneto-electric	Feb. 7, 1893
491,491	Morford, T. E	Electro-magnets	Feb. 7, 1893
496,432	Morgan, W. H	Cranes and derricks, traveling, double track	May 2, 1893
496,433	Morgan, W. H	Cranes and derricks, non-pivoted jib, rotating	May 2, 1893
496,427	Morgan, W. H	Cranes and derricks, traveling, double track	May 2, 1893
496,429	Morgan, W. H	Cranes and derricks, rivoted jib, rotary, portable	May 2, 1893
496,945	Morgan, W. H	Motors	May 9, 1893
11,303	Morford, T. E	Conductors	Feb. 7, 1893
490,917	Morris, E. P	Cut-outs, thermal	Jan. 31, 1893
435,293	Mosher, J. A	Lights, arc, gravity feed, clutch	Nov. 1, 1892
483,162	Muller, F	Coin controlled apparatus, telephones	Sept. 27, 1892
479,828	Mumford, E. H	Steering and propulsion	Aug. 2, 1892
500,027	Murdock, W. J	Bells	June 20, 1893
498,674	Murray, D	Telegraphy, printing	May 30, 1893
483,856	Murphy, W. G	Railways, systems, conduit	Oct. 4, 1893
496,890	Moxham, A. J	Metal working	May 9, 1893
497,808	Moxham, A. J	Heating, metal working	May 23, 1893
430,372	Myers, G. F	Lighting, systems, car	Aug. 9, 1892
490,161	Nadeau, J. A	Alarms, burglar	Jan. 17, 1893
487,092	Nate, J. J	Motors, hand operating devices	Nov. 29, 1892
494,344	Neal, J. H	Electric locomotives	Mar. 28, 1893
486,883	Neal, A. D. and Eaton, H. F	Telegraphy, printing, wheel	Nov. 29, 1892
487,227	Neal, A. D. and Eaton, H. E	Telegraphy, printing	Nov. 29, 1892
487,228	Neal, A. D. and Eaton, H. E	do	Nov. 29, 1892
487,229	Neal, A. D. and Eaton, H. E	do	Nov. 29, 1892
480,340	Neal, F. H. and Donnelly, J. R	Alarms, burglar	Aug. 9, 1892
482,265	Nebel, J	Magneto-electric	Sept. 6, 1892
497,197	Nellis, A. J	Dressing stone	May 9, 1893
487,881	Newman, N	Lighting, systems	Dec. 13, 1892
480,272	Nichols, E. J	Air and gas engines	Aug. 9, 1892
485,647	Nichols, D. H. and Colton, C. L. and C. A	Lighting, systems, car	Nov. 8, 1892
500,075	Nickerson, W. E	Lights, incandescent	June 20, 1893
500,076	Nickerson, W. E	do	June 20, 1893
500,077	Nickerson, W. E. and Cary, E. E	do	June 20, 1893
500,078	Nickerson, W. E	do	June 20, 1893
500,079	Nickerson, W. E	do	June 20, 1893
490,211	Nielsen, H. P	Telegraphy, fire, engine-house, apparatus	Jan. 17, 1893
481,912	Noll, A	Conductors	Aug. 30, 1892
481,913	Noll, A	do	Aug. 30, 1892
481,914	Noll, A	Connectors	Aug. 30, 1892
484,232	Nolley, D. D	Alarms, burglar	Oct. 11, 1892
484,233	Nolley, D. D	do	Oct. 11, 1892
488,878	Noran, W	Lights, incandescent, special features	Dec. 27, 1892
497,650	Nordmann, P	Lighting, systems	May 16, 1893
498,566	Nordmann, P	Lights, arc, gravity feed, clutch	May 30, 1893
481,043	Noriega, E	Telephones, electric	Aug. 16, 1892
481,049	Noriega, E	do	Aug. 16, 1892

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481,050	Noriega, E	Telephones, electric	Aug. 16, 1892
481,051	Noriega, E	do	Aug. 16, 1892
494,964	Northrup, E. F	Galvanometers	Apr. 4, 1893
497,200	Nortney, J. and Shefold, F	Lights, arc, special features	May 9, 1893
499,848	Norton, F. O	Batteries, secondary	June 20, 1893
487,093	Noxon, C. P. L.	Galvanometers	Nov. 29, 1892
500,417	Noyes, R. N	Lighting, systems	June 27, 1893
498,722	Nutall, R. D	Railways, systems, overhead, trolley	May 30, 1893
498,723	Nutall, R. D	do	May 30, 1893
482,270	O'Connor, T. F. and Marsh, J. W	Conductors, underground	Sept. 6, 1892
488,696	Odell, H. M	Lights, arc, gravity feed, clutch	Dec. 27, 1892
479,107	Oesterreick, W	Telephones, systems, multiple switch-board, test.	July 19, 1892
486,264	O'Lalor, J. J	Batteries, galvanic	Nov. 15, 1892
486,985	Olbricht, B	Railways, systems, conduit	Nov. 29, 1892
479,171	Olt, J. F. and Kennelly, A. E	Meters	July 19, 1892
479,172	Olt, J. F. and Kennelly, A. E	do	July 19, 1892
489,687	Olt, J. F. and Kennelly, A. E	Motors, hand operating devices	Jan. 10, 1893
485,425	O'Neill, H. G	Lighting, systems	Nov. 1, 1892
485,558	O'Neill, J. O	Cut-outs, mechanical, rotary	Nov. 1, 1892
488,946	O'Neill, J. A	Lights, incandescent, special features	Dec. 27, 1892
498,078	O'Neill, H. G	Heaters	May 23, 1893
478,968	Ong, H. F	Motors	July 12, 1892
498,987	Ongley, C. E	Telegraphy, fire	June 6, 1893
498,988	Ongley, C. E	do	June 6, 1893
479,835	Osburn, H. G	Batteries, secondary	Aug. 2, 1892
496,498	Osburn, H. G	Telegraphy, lighting arresters	Nov. 22, 1892
490,753	Osburn, H. G	Batteries, secondary	Jan. 31, 1893
487,448	Osbourne, D. K	Alarms, burglar	Dec. 6, 1892
498,403	O'Shaughnessy, P. F	Railways, systems, trolleys	May 30, 1893
496,746	Oulton, J. and Edmonson, J	Meters	May 2, 1893
481,814	Overholt, F	Lights, incandescent, special features	Aug. 30, 1892
496,791	Packard, W. D	Magneto-electric	May 2, 1893
481,281	Page, A. D	Lighting, systems	Aug. 23, 1892
484,449	Page, D. S. and Bertsch, J. L	Lamps and gas fittings, signal lamps	Oct. 18, 1892
484,450	Page, D. S	Lights, incandescent, special features	Oct. 18, 1892
494,966	Page, H. S	Time alarms	Apr. 4, 1893
488,482	Pain, R. W	Music, electric actions	Dec. 20, 1892
488,899	Painter, G. E	Cut-outs, electro-magnetic	Dec. 27, 1892
483,862	Paiste, H. T	Cut-outs, mechanical, rotary	Oct. 4, 1892
486,234	Parcelle, A. L	Magneto-electric	Nov. 15, 1892
490,306	Parker, R. and Sutton, B. F	Railways, systems, closed conduit	Jan. 24, 1893
482,586	Parker, T	Furnaces, electric	Sept. 13, 1892
487,154	Parker, J. A. and Summers, L. L	Telegraphy, automatic	Nov. 29, 1892
491,294	Parrot, G. V. M. A. and Reignier, A. C	Magneto-electric	Feb. 7, 1893
493,337	Parshall, H. F	do	Mar. 14, 1893
480,739	Parshall, H. F	do	Aug. 16, 1892
480,740	Parshall, H. F	do	Aug. 16, 1892
499,350	Parshall, H. F	do	June 13, 1893
481,624	Pass, J. and Seymour, A. P	Ceiling blocks	Aug. 30, 1892
488,285	Patenall, T. H	Railway signals	Dec. 20, 1892
480,411	Patenall, T. H	Railway signals, block systems	Aug. 9, 1892
480,507	Patenall, T. H	Railway signals, track instruments	Aug. 9, 1892
495,561	Paterson, B. S	Magneto-electric	Apr. 18, 1893
491,811	Patin, O	do	Feb. 14, 1893
498,021	Pattee, H. H	Meters	May 23, 1893
498,022	Pattee, H. H	do	May 23, 1893
478,237	Pattee, H. H	do	July 5, 1892
497,336	Patterson, W. R	Conductors	May 16, 1893
497,337	Patterson, W. R	Railways, systems, overhead	May 16, 1893
488,740	Pattison, C. E	Cut-outs, mechanical	Dec. 27, 1892
495,996	Patton, W. P	Railways, systems, closed conduit	Apr. 25, 1893
487,890	Pauthonier, C	Lights, incandescent	Dec. 13, 1892
482,877	Pearce, F	Telegraphy, fire, variable signal, dial	Sept. 20, 1892
494,345	Pearce, F	Telegraphy, transmitters	Mar. 28, 1893
496,792	Peeples, G	Lights, incandescent, special features	May 2, 1893
497,251	Peeples, G	do	May 9, 1893
484,919	Pendleton, J. H	Railways, systems, circuits, multiple arc	Oct. 25, 1892
485,220	Pepper, D., jr	Magneto-electric	Nov. 1, 1892
483,940	Perkins, F. B. and Jones, C. S	Heaters	Oct. 4, 1892
491,132	Perkins, F. C	Railways, systems, closed conduit	Feb. 7, 1893
495,562	Perret, F. A	Magneto-electric	Apr. 18, 1893
479,525	Perrine, F. A. C	Conductors	July 26, 1892
484,045	Perrine, F. A. C	do	Oct. 11, 1892
486,123	Perry, J	Meters	Nov. 15, 1892
496,533	Perry, N. W	Railways, systems, circuits, multiple arc	May 2, 1893
499,930	Persson, O. F	Cut-outs, oscillating snap	June 20, 1893

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494,077	Peters, R. D	Railway signals, block systems	Mar. 21, 1893
499,143	Peterson, C	Lighting, systems	June 6, 1893
493,695	Petrow, H. P	Railways, systems, conduit	Mar. 21, 1893
480,780	Pfannkuche, G	Magneto-electric	Aug. 16, 1892
485,054	Pfannkuche, G	Regulators	Oct. 25, 1892
499,852	Pfannkuche, G. and A	Induction coils	June 20, 1893
495,637	Pfleger, J	Chemistry, ores	Apr. 18, 1893
479,017	Pfluger, C. A	Lights, arc, special features	July 19, 1892
482,486	Pfluger, C. A	Lights, incandescent, special features	Sept. 13, 1892
500,421	Pfluger, C. A	Lights, arc, special features	June 27, 1893
500,422	Pfluger, C. A	Lights, arc, gravity feed, clutch	June 27, 1893
500,423	Pfluger, C. A	Cut-outs, mechanical, oscillating spring	June 27, 1893
487,022	Pfouts, L. S	Lights, incandescent, special features	Nov. 29, 1892
490,307	Philipsborn, A. and Schiemann, M	Electric locomotives	Jan. 24, 1893
493,942	Philipsborn, A	do	Mar. 21, 1893
493,943	Philipsborn, A	do	Mar. 21, 1893
478,816	Piat, A	Motors	July 12, 1892
495,919	Pickering, B	Telephones, magnetic	June 6, 1893
481,120	Pickernell, F. A	Annunciators, drop	Aug. 16, 1892
492,471	Pickernell, F. A	Telegraphy, circuits and systems	Feb. 28, 1893
494,385	Pickernell, F. A. and Dunbar, F. W	Telephones, systems, multiple switch-boards, divided central.	Mar. 28, 1893
495,513	Pierce, F. J	Lights, incandescent, special features	Apr. 18, 1893
479,659	Pierce, J. A	Lights, arc, special features	July 26, 1892
481,817	Platt, S. L	Railways, systems, conduit	Aug. 30, 1892
485,221	Pocock, F. A	Motors	Nov. 1, 1892
485,478	Pollard, E	Lights, incandescent	Nov. 1, 1892
479,608	Poole, F. F	Railways, systems, overhead, trolley	July 26, 1892
480,033	Poppowitsch, E	Batteries, galvanic	Aug. 2, 1892
495,564	Porter, H. B	Bells	Apr. 18, 1893
491,133	Porter, M. D	Telegraphy, printing, multiple wheel	Feb. 7, 1893
496,207	Porter, M. D	Annunciators	Apr. 25, 1893
485,587	Potter, J. S. and Cartwright, D. J	Lights, sockets and keys	Nov. 1, 1892
489,983	Potter, W. B	Cut-outs, thermal	Jan. 17, 1893
497,601	Powers, J. J. and Van Buren, R	Conductors, underground	May 16, 1893
488,635	Prentiss, F. H	Lights, incandescent	Dec. 27, 1892
488,636	Prentiss, F. H	do	Dec. 27, 1892
487,936	Prentiss, H. S	Telegraphy, automatic	Dec. 13, 1892
496,134	Prentiss, H. S	Clocks, electric	Apr. 25, 1893
496,135	Prentiss, H. S	do	Apr. 25, 1893
496,596	Prewitt, M. Q	Railways, systems, conduit	May 9, 1893
483,388	Prewitt, W. Q	Railways, conductor supports and insulators	Sept. 27, 1892
490,678	Price, W. A	Medical and surgical, electrodes	Jan. 31, 1893
490,679	Price, W. A	do	Jan. 31, 1893
495,058	Priest, E. D	Magneto-electric	Apr. 11, 1893
496,230	Pritchett, W. W	Railways, systems, overhead, trolley	Apr. 25, 1893
496,208	Procnier, H. E	Annealing and tempering	Apr. 25, 1893
483,327	Purcell, J. J	Connectors	Sept. 27, 1892
488,027	Purcell, J. J	Conductors, underground	Dec. 13, 1892
482,879	Purdy, F	Tempering and annealing	Sept. 27, 1892
480,240	Purple, G. E. and C. W	Railways, systems, overhead, trolley	Aug. 2, 1892
496,324	Pursell, H. D. and Price, E. F	Coin-controlled apparatus, exhibitors	Apr. 25, 1893
479,333	Putnam, T. A. B	Railway signals, cab, sectional rail	July 19, 1892
484,543	Pyke, L. S. M. and Barnett, H. T	Inducturiums, transformers, stationary	Oct. 18, 1892
484,544	Pyke, L. S. M. and Barnett, H. T	do	Oct. 18, 1892
496,618	Quinn, D. J. and Hoffmann, P. W	Igniting devices, manual	May 2, 1893
478,522	Quinn, D. J. and Hoffmann, P. W	do	July 5, 1892
480,782	Quirk, M. J. and Bach, C., jr	Cut-outs, mechanical, sliding	Aug. 16, 1892
488,367	Rabbidge, P	Telephones, electric	Dec. 20, 1892
489,266	Rabbidge, P	Telegraphy, circuit closers	Jan. 3, 1893
491,857	Rae, F. B	Electric locomotives	Feb. 14, 1893
492,106	Rae, F. B	Railways, systems, conduit	Feb. 21, 1893
495,615	Rae, F. B	Railways, systems, overhead	Apr. 18, 1893
494,489	Ramsey, J., jr., and Harden, E. W	Railway signals	Mar. 28, 1893
490,630	Ransome, E. L	Conductors, underground	Jan. 24, 1893
483,309	Raymond, N. H	Bells	Sept. 27, 1892
483,310	Raymond, N. H	Annunciators	Sept. 27, 1892
497,129	Reams, A. R	Electrolysis, aqueous bath apparatus	May 9, 1893
495,835	Redfield, C. L	Printing, matrix making	Apr. 18, 1893
500,104	Reed, C. J	Railways, systems, conduit	June 20, 1893
482,753	Reed, T. L	Conductors	Sept. 20, 1892
492,309	Reenstierna, G. L	Bells	Feb. 21, 1893
484,375	Reilley, M. S	Telegraphy, railway car	Oct. 11, 1892
488,132	Reinhardt, J. H	Railways, tramway switches	Dec. 13, 1892
494,225	Remerfelt, G	Meters	Mar. 28, 1893
490,470	Remhof, C	Lamps and gas fittings, shade supports	June 13, 1893
498,570	Renehan, J. J	Street light hangers	May 30, 1893

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495,600	Rennerfelt, G. O	Electrolysis, fused bath	Apr. 18, 1893
499,681	Renstrom, N. A	Medical and surgical, chairs and couches	June 13, 1893
481,284	Rettig, A	Telephones, magnetic	Aug. 23, 1892
489,832	Rend, W. R	Batteries, galvanic	Jan. 10, 1893
489,234	Reutlinger, J	Railways, systems, overhead, trolley	Jan. 3, 1893
493,914	Reymond, A. Du Bois	Railways, systems, converter	Mar. 21, 1893
487,128	Reynolds, H. W	Alarms, burglar	Nov. 29, 1892
493,189	Reynolds, J. L	Railways, systems, closed conduit	May 23, 1893
484,822	Rhodes, H. A	Cut-outs, thermal	Oct. 25, 1892
485,658	Rice, E. W., jr	Transmission of power	Nov. 8, 1892
485,659	Rice, E. W., jr	do	Nov. 8, 1892
495,229	Rice, E. W., jr	Inductoriums, transformers, rotary	Apr. 11, 1893
498,407	Rich, R. H	Connectors	May 30, 1893
482,136	Richards, W. S	Telegraphy, circuits and systems	Sept. 6, 1892
482,137	Richards, W. S	Telegraphy, relays and sounders	Sept. 6, 1892
479,020	Richter, M. A. and Nolen, J. G	Lights, incandescent, special features	July 19, 1892
496,137	Ricke, G. H. E	Telephones, mechanical	Apr. 25, 1893
483,366	Ricker, A. L	Railways, systems, converter	Sept. 27, 1892
483,582	Ricker, A. L	Motors	Oct. 4, 1892
498,573	Riegger, C	Music, electric actions	May 30, 1893
485,017	Ries, E. E	Heating, soldering	Oct. 25, 1892
488,835	Ries, E. E	Lights, sockets and keys	Dec. 27, 1892
488,951	Ries, E. E	do	Dec. 27, 1892
499,040	Ries, E. E	Metal working	June 6, 1893
494,596	Ring, J. H	Telegraphy, fire	Apr. 4, 1893
485,567	Ringin, J	Coin-controlled apparatus, exhibitors, surface	Nov. 1, 1892
480,745	Robb, J. T	Cut-outs, thermal	Aug. 16, 1892
491,596	Robb, J. T	Ceiling blocks	Feb. 14, 1893
493,411	Robb, J. T	Lights, incandescent, special features	Mar. 14, 1893
482,139	Roberts, E. F	Valve controllers	Sept. 6, 1892
491,595	Roberts, R. S	Telegraphy, automatic	Feb. 14, 1893
492,837	Robinson, E. W	Railway signals, cab, sectional rail	Mar. 7, 1893
488,222	Rockwell, F. C	Lights, sockets and keys	Dec. 20, 1892
486,054	Rodgers, W. H	Alarms	Nov. 8, 1892
492,236	Rodgers, W. H	do	Feb. 21, 1893
500,272	Roehl, C. E., Mitchell, S. Z. and Wetmore, E. P	Heaters	June 27, 1893
497,822	Roger, H. C	Medical and surgical, body-wear	May 23, 1893
483,725	Rogers, C. W	Applications, general	Oct. 4, 1892
494,762	Rogers, J. B	Annunciators, step-by-step	Apr. 4, 1893
487,644	Rogers, J. S	Batteries, secondary	Dec. 6, 1892
490,363	Rohrer, A. L	Cut-outs, mechanical	Jan. 24, 1893
496,901	Rohrer, A. L	Lighting, systems	May 9, 1893
483,768	Rolfe, C. A	Telegraphy, fire	Oct. 4, 1892
493,447	Rollins, G. A	Magneto-electric	Mar. 14, 1893
492,633	Rollins, K. W	Lighting, systems, automatic regulation	Feb. 28, 1893
486,354	Ross, J. J	Bells	Nov. 15, 1892
486,569	Ross, J. J	Railway signals, block	Nov. 22, 1892
480,673	Rothlisberger, E	Alarms	Aug. 9, 1892
495,638	Rowley, L. B	Batteries, secondary	Apr. 18, 1893
480,038	Rudd, C. H	Lighting, systems, test	Aug. 2, 1892
480,039	Rudd, C. H	Galvanometers	Aug. 2, 1892
483,168	Rudd, C. H	do	Sept. 27, 1892
498,698	Ruggles, C. H	Ceiling blocks	May 30, 1893
493,842	Rushmore, A. W	Lighting, systems	Mar. 21, 1893
490,755	Russell, G. L	Connectors	Jan. 31, 1893
499,646	Russell, G. W	Cut-outs, mechanical, oscillating snap	June 13, 1893
483,123	Russell, G. W. and Minor, D. B	Cut-outs, electro-magnets	Sept. 20, 1892
499,596	Russell, W. H. and G. E	Igniting devices, manual	June 13, 1893
489,330	Rutter, A. L	Railways, systems, telpher	Jan. 3, 1893
481,590	Sachs, J	Telegraphy, fire	Aug. 30, 1892
492,110	Sack, J	Telephones, calls, step-by-step	Feb. 21, 1893
497,552	Sachs, J	Lighting, systems, test	May 16, 1893
498,448	Sachs, J	Telegraphy, fire	May 30, 1893
485,334	Safford, A. G	Telegraphy, relays and sounders	Nov. 1, 1892
493,789	Saitz, J. F	Railways, systems, overhead, trolley	Mar. 21, 1893
481,285	Salisk, C. J. and Lipp, E	Lamps and gas fittings, globes	Aug. 23, 1892
496,702	Sanders, J. F. and S. J	Lights, arc and incandescent	May 2, 1893
496,701	Sanders, J. F. and S. J	Lights, filaments and carbons	May 2, 1893
484,865	Sanford, C. E	Cut-outs, electro-magnetic	Oct. 25, 1892
498,492	Sangster, J	Igniting devices, automatic	May 30, 1893
499,254	Sargent, H	Connectors	June 13, 1893
499,473	Sautter, G	Head lights	June 13, 1893
495,913	Savager, J. S., jr	Railway signals, block	Apr. 18, 1893
478,367	Sawyer, W. H	Conductors, anti-inductive	July 5, 1892
481,062	Sayer, R. C	Railway signals, cab, sectional rail	Aug. 16, 1892
498,309	Scattergood, C. F	Telephones, electric	May 30, 1893
488,225	Schafer, E	Railway signals, block systems	Dec. 20, 1892

No.	NAME.	CLASS.	DATE.
480,284	Scharf, P	Lights, incandescent	Aug. 9, 1892
480,968	Schefbauer, R	Lights, arc, gravity feed, gear-clutch	Aug. 16, 1892
490,684	Sebiling, G. W. and Haslam, J. G	Alarms	Jan. 31, 1893
498,577	Schmid, A	Electric locomotives	May 30, 1893
495,601	Schmidt, F. T	Lights, arc, gravity feed, clutch	Apr. 18, 1893
480,285	Schmit, C	do	Aug. 9, 1892
479,225	Schreuder, J. G	Railway signals, sectional rail	July 19, 1892
479,666	Schreuder, J. G. L	Railway signals	July 26, 1892
486,987	Schultz, W. J	Cut-outs, mechanical, oscillating spring	Nov. 29, 1892
438,615	Schlosser, F. P	Railway signals, cab, sectional rail	Dec. 27, 1892
489,237	Schweigler, W. J	Annunciators, drop system	Jan. 3, 1893
478,643	Scott, E. H	Heating, metal working	July 12, 1892
478,644	Scott, E. H	do	July 12, 1892
480,787	Scott, W	Lights, incandescent, special features	Aug. 16, 1892
482,699	Scott, W	Time signals	Sept. 13, 1892
492,544	Scott, C. F	Telegraphy, lightning arresters	Feb. 28, 1893
500,543	Scott, C. F	Galvanometers	June 27, 1893
489,077	Seranton, G. H. and Spillman, L	Railways, conductor supports and insulators	Jan. 3, 1893
486,507	Scribner, C. A	Telephones, systems, multiple switch-board, test.	Nov. 22, 1892
481,677	Scribner, C. E	Lights, arc, gravity feed, clutch	Aug. 30, 1892
481,678	Scribner, C. E	Telephones, systems	Aug. 30, 1892
481,679	Scribner, C. E	Telephones, systems, multiple switch-board, test.	Aug. 30, 1892
483,175	Scribner, C. E	do	Sept. 27, 1892
484,611	Scribner, C. E	Regulators	Oct. 18, 1892
484,612	Scribner, C. E	Telephones, systems, multiple switch-board, test.	Oct. 18, 1892
484,613	Scribner, C. E	Telephones, systems	Oct. 18, 1892
484,867	Scribner, C. E	do	Oct. 25, 1892
486,506	Scribner, C. E	do	Nov. 22, 1892
486,953	Scribner, C. E	Lights, arc, gravity feed, clutch	Nov. 29, 1892
487,095	Scribner, C. E	Telegraphy, fire	Nov. 29, 1892
487,096	Scribner, C. E	Telephones, systems, multiple switch-board, test.	Nov. 29, 1892
487,097	Scribner, C. E	Telephones, systems, multiple switch-board, divided central.	Nov. 29, 1892
487,098	Scribner, C. E	Telephones, systems, multiple switch-board, test.	Nov. 29, 1892
488,033	Scribner, C. E. and Warner, E. P	Telephones, systems	Dec. 13, 1892
488,034	Scribner, C. E	Anti-induction devices	Dec. 13, 1892
488,035	Scribner, C. E	Telephones, systems, multiple switch-board, test.	Dec. 13, 1892
488,036	Scribner, C. E	do	Dec. 13, 1892
488,037	Scribner, C. E	do	Dec. 13, 1892
488,038	Scribner, C. E	do	Dec. 13, 1892
488,579	Scribner, C. E	Telegraphy, fire	Dec. 27, 1892
489,098	Scribner, C. E	Telephones, systems	Jan. 3, 1893
489,099	Scribner, C. E	do	Jan. 3, 1893
489,100	Scribner, C. E	do	Jan. 3, 1893
489,570	Scribner, C. E	do	Jan. 10, 1893
489,571	Scribner, C. E. and Patterson, W. R	Telephones, systems, multiple switch-board, test.	Jan. 10, 1893
489,990	Scribner, C. E	Telephones, electric	Jan. 17, 1893
491,250	Scribner, C. E	Telephones, systems, multiple switch-board, test.	Feb. 7, 1893
491,251	Scribner, C. E	Lights, arc, gravity feed, clutch	Feb. 7, 1893
491,603	Scribner, C. E	do	Feb. 14, 1893
491,604	Scribner, C. E	do	Feb. 14, 1893
491,605	Scribner, C. E	do	Feb. 14, 1893
491,688	Scribner, C. E	Telephones, systems, multiple switch-board, divided central.	Feb. 14, 1893
496,449	Scribner, C. E. and Warner, E. P	Magneto-electric	May 2, 1893
496,904	Scribner, C. E	Telephones, systems	May 9, 1893
496,905	Scribner, C. E	do	May 9, 1893
496,906	Scribner, C. E	do	May 9, 1893
496,907	Scribner, C. E	do	May 9, 1893
497,898	Scribner, C. E	Lights, arc, special features	May 23, 1893
498,312	Scribner, C. E	Lighting, systems	May 30, 1893
11,306	Scribner, C. E (Reis.)	Telephones, systems, multiple switch-board, test.	Feb. 7, 1893
489,991	Seamans, I. M	Dampers, automatic expansion	Jan. 17, 1893
484,614	Seaton, B. C	Railway signals, cab, sectional rail	Oct. 18, 1892
478,475	Secor, J. B	Motors	July 5, 1892
478,821	See, A. B. and Tyler, W. L	Elevators	July 12, 1892
500,274	See, A. B. and Tyler, W. L	Motors, hand operating devices	June 27, 1893
491,252	Seely, J. A	Telephones, systems, multiple switch-board, test.	Feb. 7, 1893

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479,308	Seiler, P	Telephones, calls, step-by-step	July 19, 1892
493,125	Seiler, P	Railway signals, block	Mar. 7, 1893
478,135	Selden, C	Telegraphy, railway car	July 5, 1892
480,375	Selden, C	Lighting, systems	Aug. 9, 1892
496,959	Severy, M. L	Solar heaters	May 9, 1893
481,246	Seymour, A. P	Lights, incandescent, special features	Aug. 23, 1892
483,771	Seymour, A. P	Insulators	Oct. 4, 1892
482,323	Seymour, C. E	Separators	Sept. 6, 1892
489,101	Seymour, C. E	Mills, amalgamator, mercury	Jan. 3, 1893
480,747	Shaffer, H. C	Fire engines, stationary	Aug. 16, 1892
481,975	Shallenberger, O. B	Meters	Sept. 6, 1892
487,543	Shallenberger, O. B	Systems of distribution	Dec. 6, 1892
481,676	Sharp, C. C	Electrolysis, ozone	Aug. 30, 1892
481,833	Sharpsteen, S. H	Hoisting, elevated carrier	Aug. 30, 1892
479,226	Shaver, G. F	Telephones, magnetic	July 19, 1892
479,227	Shaver, G. F	Telephones, systems	July 19, 1892
481,204	Shea, C. A	Telephones, systems, details	Aug. 23, 1892
489,764	Sheldon, J. B., Murnane, D. J. and Van Beck, G. L.	Railways, systems, closed conduit	Jan. 10, 1893
479,849	Sheperd, T. W	Telegraphy, circuit closers, thermal	Aug. 2, 1892
493,601	Shepard, T. W	do	Mar. 14, 1893
493,602	Shepard, T. W	do	Mar. 14, 1893
478,175	Shoemaker, M	Railways, systems, overhead	July 5, 1892
478,242	Short, S. H	Electric locomotives	July 5, 1892
478,477	Short, S. H	do	July 5, 1892
478,718	Short, S. H	Cut-outs, mechanical	July 12, 1892
479,469	Short, S. H	Electric locomotives	July 26, 1892
491,666	Short, S. H	do	Feb. 14, 1893
491,667	Short, S. H	do	Feb. 14, 1893
486,902	Shults, J. W	Medical and surgical, body-wear	Nov. 29, 1892
498,141	Siebold, A. C	Lights, filaments and carbons	May 23, 1893
484,120	Silvey, W. L	Batteries, secondary	Oct. 11, 1892
489,505	Silvey, W. L	Pulleys and shafting	Jan. 10, 1893
478,293	Simpson, F	Medical and surgical, body-wear	July 5, 1892
496,067	Skelton, F. C	Alarms	Apr. 25, 1893
481,430	Slater, W. W. and Barnes, H. C	Railway signals, block	Aug. 23, 1892
488,666	Sloper, T. B	Telephones, systems	Dec. 27, 1892
489,616	Sloss, A. M	Igniting devices, manual	Jan. 10, 1893
484,724	Smith, A. W	Magneto-electric	Oct. 18, 1892
492,244	Smith, A. W	do	Feb. 21, 1893
484,344	Smith, E. B	Railways, systems, overhead, trolley	Oct. 11, 1892
490,725	Smith, F. G	Alarms	Jan. 31, 1893
479,673	Smith, F. L. M. and Bryan, W. J	Lighting, systems	July 26, 1892
484,825	Smith, F. S	Lights, incandescent	Oct. 25, 1892
478,245	Smith, H. V	Electric locks	July 5, 1892
481,247	Smith, J. G	Telegraphy, multiplex	Aug. 23, 1892
496,103	Smith, L. T	Igniting devices	Apr. 25, 1893
500,256	Smith, M. H	Railways, systems, circuits	June 27, 1893
498,906	Smith, M. H	Railways, systems, conduit	June 6, 1893
484,618	Smith, S. D	Medical and surgical, exercising apparatus	Oct. 18, 1892
490,992	Snyder, J. and Sandy, W. J. L	Lights, arc, gravity feed, clutch	Jan. 31, 1893
482,594	Soley, W. H. and Perkins, W. W	Electric locomotives	Sept. 13, 1892
478,138	Sperry, E. A	do	July 5, 1892
478,139	Sperry, E. A	do	July 5, 1892
478,140	Sperry, E. A	Connectors	July 5, 1892
478,141	Sperry, E. A	Mining machines	July 5, 1892
478,142	Sperry, E. A	Magneto-electric	July 5, 1892
479,029	Sperry, E. A	Lights, arc, gravity feed, clutch	July 19, 1892
479,030	Sperry, E. A	Magneto-electric	July 19, 1892
480,525	Sperry, E. A	Lights, arc, gravity feed, clutch	Aug. 9, 1892
499,943	Spillman, L	Railways, conductor supports and insulators	June 20, 1893
481,739	Sprague, F. J	Motors, hand operating devices	Aug. 30, 1892
480,526	Squires, H. S	Measuring instruments, passengers	Aug. 9, 1892
480,749	Stanley, L. T	Lights, incandescent, special features	Aug. 16, 1892
481,378	Stanley, L. T	Canopy, shades and reflectors	Aug. 23, 1892
481,979	Stanley, L. T	Electrolysis, purifying liquids, water	Sept. 6, 1892
479,675	Stanley, W., jr., and Kelley, J. F	Motors, alternating	July 26, 1892
479,676	Stanley, W., jr., and Kelley, J. F	do	July 26, 1892
479,727	Stanley, W., jr., and Kelley, J. F	do	July 26, 1892
483,816	Stanley, W. and Kelley, J. F	do	Oct. 4, 1892
484,545	Stanley, W. and Kelman, J. H	Cut-outs, thermal	Oct. 18, 1892
494,513	Stanley, W., jr	Meters	Mar. 28, 1893
496,212	Stanley, W., jr	Systems of distribution	Apr. 25, 1893
498,907	Stanley, W. and Tobey, W. B	Telegraphy, condensers	June 6, 1893
499,446	Stanley, W. and Kelley, J. F	Magneto-electric	June 13, 1893
500,301	Stanley, W. and Kelley, J. F	do	June 27, 1893
492,245	Standiford, J. F	Photography, retouching	Feb. 21, 1893

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489,835	Stark, C. A	Railways, systems, closed conduit	Jan. 10, 1893
489,207	Starkweather, M. G	Railways, track cleaners, wheel fenders	Jan. 3, 1893
498,864	Steele, J. W	Railway signals, block systems	June 6, 1893
500,276	Stevens, F. M	Electric locomotives	June 27, 1893
488,256	Stevens, N. P	Lights, filaments and carbons	Dec. 20, 1892
492,847	Stevens, T. E	Lights, incandescent, special features	Mar. 7, 1893
485,895	Steers, J. R	Lights, arc, gravity feed, gear-clutch	Nov. 8, 1892
496,801	Stevenson, E. W	Lighting, systems, test	May 2, 1893
480,147	Stewart, J. B	Railway signals, sectional rail	Aug. 2, 1892
491,609	Stewart, J. B	do	Feb. 14, 1893
492,850	Strowger, A. B. and W. S	Telegraphy, circuit closers	Mar. 7, 1893
498,865	Stewart, J. B. and Wattson, W. G	Railway signals, sectional rail	June 6, 1893
499,805	Stewart, J. B	do	June 20, 1893
481,075	Stieus, P	Batteries, galvanic	Aug. 16, 1892
482,104	Stieringer, L	Lights, special features	Sept. 6, 1892
498,585	Still, W. J	Motors	May 30, 1893
484,123	Stone, C. A. and Webster, E. S	Railways, systems	Oct. 11, 1892
485,668	Stone, C. A. and Webster, E. S	do	Nov. 8, 1892
487,102	Stone, J. S	Telephones, systems	Nov. 29, 1892
483,728	Stromberg, A	Alarms, burglar	Oct. 4, 1892
486,908	Stromberg, A	do	Nov. 29, 1892
493,369	Stromberg, A	Cut-outs, thermal	Mar. 14, 1893
499,261	Stromberg, A	Alarms, burglar	June 13, 1893
497,356	Strong, G. S	Electric locomotives	May 16, 1893
486,909	Strowger, A. B	Telephones, systems, automatic	Nov. 29, 1892
488,041	Storey, I. E	Motors	Dec. 13, 1892
492,478	Stuarts, C. F. A	Alarms, burglar	Feb. 28, 1893
482,986	Stuart, J. A	Lights, arc, gravity feed, gear-clutch	Sept. 20, 1892
497,504	Stuart, J. E. and James, W. S	Magneto-electric	May 16, 1893
497,062	Sturtevant, F	Alarms, burglar	May 9, 1893
483,179	Sturtevant, T. L	Mill stone dress mills	Sept. 27, 1892
495,125	Stupakoff, S. H	Electro-magnets	Apr. 11, 1893
497,732	Stupakoff, S. H	Cut-outs, thermal	May 16, 1893
484,924	Sutton, B. F	Railways, systems, closed conduit	Oct. 25, 1892
500,041	Swartz, G. W	Railway signals, block systems	June 20, 1893
497,836	Sykes, W. R. and O'Donnell, J. P	do	May 23, 1893
487,795	Taintor, G	Telephones, systems, multiple switch-board	Dec. 13, 1892
489,422	Tatro, C. P	Railways, systems, closed conduit	Jan. 3, 1893
482,324	Teague, F	Meters	Sept. 6, 1892
496,371	Teague, F	do	Apr. 25, 1893
497,144	Teal, L	Motors, hand operating devices	May 9, 1893
485,754	Teeft, E. N	Medical and surgical, body-wear	Nov. 8, 1892
487,796	Tesla, N	Transmission of power	Dec. 13, 1892
491,387	Thaler, L	Railway signals, sectional rail	Feb. 7, 1893
478,529	Thomas, C. W	Magneto-electric	July 5, 1892
480,678	Thomas, C. W	Dental instruments	Aug. 9, 1892
491,691	Thomas, G. L	Railways, systems, circuit, series	Feb. 14, 1893
485,238	Thomas, E. M	Medical and surgical, baths	Nov. 1, 1892
494,042	Thomas, W. M	Magneto-electric	Mar. 21, 1893
494,091	Thomas, W. M	Igniting devices, manual	Mar. 21, 1893
478,145	Thomson, E	Lights, arc, positive feed, gear-clutch	July 5, 1892
478,722	Thomson, E	Systems of distribution	July 12, 1892
480,392	Thomson, E	Heaters	Aug. 9, 1892
481,878	Thomson, E	Telephones, systems	Aug. 30, 1892
482,209	Thomson, E	Meters	Sept. 6, 1892
482,397	Thomson, E	Magneto-electric	Sept. 13, 1892
483,700	Thomson, E	do	Oct. 4, 1892
485,239	Thomson, E	Regulators	Nov. 1, 1892
485,669	Thomson, E	Inductoriums, transformers, rotary	Nov. 8, 1892
486,916	Thomson, E	Inductoriums, transformers, stationary	Nov. 29, 1892
487,302	Thomson, E	Heating, metal working	Dec. 6, 1892
488,585	Thomson, E	Lights, arc, gravity feed, clutch	Dec. 27, 1892
489,046	Thomson, E	Lights, arc, positive feed, gear-clutch	Jan. 3, 1893
490,178	Thomson, E	Cut-outs, mechanical	Jan. 17, 1893
490,376	Thomson, E	Magneto-electric	Jan. 24, 1893
490,710	Thomson, E	Clutches, multiple disk	May 2, 1893
493,313	Thomson, E	Magneto-electric	Mar. 14, 1893
493,314	Thomson, E	Telegraphy, lightning arresters	Mar. 14, 1893
493,739	Thomson, E	Lights, arc, positive feed	Mar. 21, 1893
495,071	Thomson, E	Applications, tools and machines	Apr. 11, 1893
495,714	Thomson, E	Telegraphy, lighting arresters	Apr. 18, 1893
495,853	Thomson, E	do	Apr. 18, 1893
496,019	Thomson, E	Heating, metal working	Apr. 25, 1893
496,020	Thomson, E	Systems of distribution	Apr. 25, 1893
496,455	Thomson, E. and Rice, E. W., jr	Lighting, systems, automatic regulation	May 2, 1893
496,456	Thomson, E. and Rice, E. W., jr	Magneto-electric	May 2, 1893
496,918	Thomson, E	Lighting, systems	May 9, 1893

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497,361	Thomson, E	Magneto-electric	May 16, 1893
497,838	Thomson, E	Telegraphy, lightning arresters	May 23, 1893
498,327	Thomson, E	Magneto-electric	May 30, 1893
492,312	Thomson, J	Lights, arc, positive feed, gear-clutch	Feb. 21, 1893
494,657	Thomson, M. E	Meters	Apr. 4, 1893
497,558	Thompson, F. H	Lights, arc, special features	May 16, 1893
484,762	Thorn, J. E	Bells	Oct. 18, 1892
479,035	Thum, M	Lighting, systems	July 19, 1892
485,591	Tilden, J. A	Time checks	Nov. 1, 1892
489,423	Tirrell, J. P	Time alarms	Jan. 3, 1893
489,424	Tirrell, J. P	Valve controllers	Jan. 3, 1893
480,151	Tobey, C. W	Rheostats	Aug. 2, 1892
480,152	Tobey, C. W	Connectors	Aug. 2, 1892
499,610	Todd, J. T	Telemetry	June 13, 1893
487,356	Tomlinson, T	Lighting, systems, hand regulation	Dec. 6, 1892
492,545	Trafford, W	Annunciators, time	Feb. 28, 1893
479,539	Travis, C. L	Matrix making	July 26, 1892
495,281	Tremper, F. E	Air and gas engines, explosive	Apr. 11, 1893
489,883	Tripp, T	Electric locomotives	Jan. 10, 1893
500,357	Tropp, B	Igniting devices, manual	June 27, 1893
490,326	Trout, F. B	Alarms, burglar	Jan. 24, 1893
479,859	Tucker, A. F	Telegraphy, keys	Aug. 2, 1892
478,661	Tudor, H	Batteries, secondary	July 12, 1892
494,499	Turbayne, W. A	Lights, arc, special features	Mar. 28, 1893
495,643	Turbayne, W. A	Lights, arc, gravity feed, clutch	Apr. 18, 1893
497,104	Turbayne, W. A	Lights, arc, special features	May 9, 1893
480,950	Turner, A. G	Running gear	Aug. 16, 1892
491,275	Tyler, H. L	Telephones, electric	Feb. 7, 1893
494,765	Tyler, H. L	Alarms	Apr. 4, 1893
482,325	Tyner, J. M. C. and Irviog, S. S	Railways, systems, overhead, trolley	Sept. 6, 1892
480,794	Unwin, P. J. and Howard, H	Heating, metal working	Aug. 16, 1892
484,068	Urbain, E	Railway signals, block systems	Oct. 11, 1892
480,883	Usher, E. P	Batteries, secondary	Aug. 16, 1892
480,884	Usher, E. P	do	Aug. 16, 1892
480,885	Usher, E. P	do	Aug. 16, 1892
480,886	Usher, E. P	do	Aug. 16, 1892
480,887	Usher, E. P	do	Aug. 16, 1892
484,380	Utley, M. R	Cut-outs, mechanical	Oct. 11, 1892
500,359	Utzinger, A	Indicators	June 27, 1893
494,608	Van Denburgh, N. and Loveridge, F. H	Magneto-electric connecting devices	Apr. 4, 1893
479,960	Van Depoele, C. J	Transmission of power	Aug. 2, 1892
479,962	Van Depoele, C. J	do	Aug. 2, 1892
479,963	Van Depoele, C. J	do	Aug. 2, 1892
479,964	Van Depoele, C. J	do	Aug. 2, 1892
479,965	Van Depoele, C. J	Pile drivers	Aug. 2, 1892
479,966	Van Depoele, C. J	Transmission of power	Aug. 2, 1892
488,928	Van Depoele, C. J	Systems of distribution	Dec. 27, 1892
488,929	Van Depoele, C. J	Railways, systems, overhead, trolley	Dec. 27, 1892
488,930	Van Depoele, C. J	Electric locomotives	Dec. 27, 1892
495,383	Van Depoele, C. J	Railways, systems, overhead, trolley	Apr. 11, 1893
495,443	Van Depoele, C. J	do	Apr. 11, 1893
496,329	Van Depoele, C. J	Railways, systems, telfer	Apr. 25, 1893
496,330	Van Depoele, C. J	Electric locomotives	Apr. 25, 1893
496,331	Van Depoele, C. J	Motors, reciprocating	Apr. 25, 1893
487,654	Vanderpool, A. A	Railways, systems, conduit	Dec. 6, 1892
493,000	Van Duzer, L. S	Steering and propulsion	Mar. 7, 1893
490,327	Van Hoevenbergh, H	Lighting, systems	Jan. 24, 1893
478,664	Van Kerckhove, A	Batteries, secondary	July 12, 1892
478,383	Van Nuis, C. L	Telegraphy, lighting arresters	July 5, 1892
489,277	Varley, R., jr	Electro-magnets	Jan. 3, 1893
484,574	Venker, J. B	Heaters	Oct. 18, 1892
490,605	Vetter, A. F	Lights, sockets and keys	Jan. 24, 1893
480,393	Vineing, H. E	Regulators	Aug. 9, 1892
483,272	Vineing, H. E	Telephones, calls, step-by-step	Sept. 27, 1892
492,809	Von der Kammer, J	Lights, incandescent	Mar. 7, 1893
489,573	Von Siemens, G. W	Railways, systems, closed conduit	Jan. 10, 1893
493,948	Von Siemens, G. W	do	Mar. 21, 1893
491,758	Von Orth, L	Telegraphy, fire	Feb. 14, 1893
499,485	Voorhees, G. T	Cut-outs, thermal	June 13, 1893
499,614	Voorhees, G. T	do	June 13, 1893
490,460	Wachtel, C	Magneto-electric	Jan. 24, 1893
487,437	Wagner, P	Bells	Dec. 6, 1892
489,551	Waite, C. N	Electro-chemistry apparatus	Jan. 10, 1893
497,226	Waite, H. E	Friction generators	May 9, 1893
492,645	Wait, H. St. C	Railway signals	Feb. 28, 1893
478,485	Waldron, C. F	Batteries, secondary	July 5, 1892
492,646	Walker, W. J	Alarms, burglar	Feb. 28, 1893

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499,864	Walker, W. J. and Bedford, A. L	Alarms, burglar	June 20, 1893
497,844	Walls, M. C	Cut-outs, thermal	May 23, 1893
481,517	Walsh, J	Railways, systems, overhead, trolley	Aug. 23, 1892
487,655	Wandell, J. M	Medical and surgical	Dec. 6, 1892
484,479	Ward, B. B	Lighting, systems	Oct. 18, 1892
484,480	Ward, B. B	Lights, arc, special features	Oct. 18, 1892
492,124	Ward, B. B	Lights, arc, gravity feed, gear-clutch	Feb. 21, 1893
498,372	Ward, B. B	Alarms	May 30, 1893
479,101	Waring, J	Rheostats	July 19, 1892
487,306	Waring, J	do	Dec. 6, 1892
497,088	Waring, J	Lights, incandescent	May 9, 1893
480,049	Warner, E. P	Magneto-electric	Aug. 2, 1892
480,050	Warner, E. P	Lights, arc, gravity feed, clutch	Aug. 2, 1892
480,981	Warner, E. P	Dynamometers	Aug. 16, 1892
482,820	Warner, E. P	Lights, arc, special features	Sept. 20, 1892
483,729	Warner, E. P	Magneto-electric	Oct. 4, 1892
486,241	Warner, E. P	Cut-outs, mechanical, oscillating spring	Nov. 15, 1892
487,307	Warner, E. P	Magneto-electric	Dec. 6, 1892
500,306	Warner, E. P	Railways, systems, conduit	June 27, 1893
488,233	Washburn, G. A	Batteries, secondary	Dec. 20, 1892
482,444	Washburn, W. E	Batteries, galvanic	Sept. 13, 1892
500,172	Washburn, W. E	Medical and surgical, electrodes	June 27, 1893
483,187	Waterhouse, A. G	Meters	Sept. 27, 1892
495,077	Waterhouse, A. G	Lights, arc, gravity feed, clutch	Apr. 11, 1893
478,180	Waters, B. E	Time lamp lighters	July 5, 1892
489,052	Watts, J. E	Dampers, automatic pressure motors	Jan. 3, 1893
479,509	Weaphy, J. W., jr	Lamps and gas fittings, harps and hangers	July 26, 1892
488,462	Weaver, W	Railways, car starters	Dec. 20, 1892
494,610	Webb, G. W	Cut-outs, mechanical	Apr. 4, 1893
495,861	Webb, G. F	Medical and surgical, body-wear	Apr. 18, 1893
482,535	Weber, A	Lights, arc, special features	Sept. 13, 1892
496,176	Wegner, G. and Gührs, P	Electrolysis, aqueous bath	Apr. 25, 1893
479,178	Weiny, R. H	Telegraphy, repeaters	July 19, 1892
488,298	Welsh, F. P	Drop light, spring drum	Dec. 20, 1892
478,149	Werline, H. E	Lights, sockets and keys	July 5, 1892
487,808	Werling, J. and Agnew, J. F	Railways, systems, overhead, trolley	Dec. 13, 1892
497,394	Westinghouse, G., jr	Railways, systems, conduit	May 16, 1893
497,436	Westinghouse, G., jr	Railways, systems, closed conduit	May 16, 1893
491,970	Weston, A. W	Motors	Feb. 14, 1893
493,439	Weston, A. W	Magneto-electric	Mar. 14, 1893
22,101	Weston, E (Design)	Measuring instruments	Jan. 3, 1893
480,888	Weston, E	Galvanometers	Aug. 16, 1892
480,889	Weston, E	do	Aug. 16, 1892
480,890	Weston, E	Clocks, electric	Aug. 16, 1892
480,891	Weston, E	Galvanometers	Aug. 16, 1892
480,892	Weston, E	Rheostats	Aug. 16, 1892
480,893	Weston, E	do	Aug. 16, 1892
480,894	Weston, E	Galvanometers	Aug. 16, 1892
480,895	Weston, E	do	Aug. 16, 1892
480,896	Weston, E	do	Aug. 16, 1892
480,897	Weston, E	do	Aug. 16, 1892
480,898	Weston, E	do	Aug. 16, 1892
480,899	Weston, E	do	Aug. 16, 1892
480,900	Weston, E	Lights, sockets and keys	Aug. 16, 1892
486,689	Weston, E	Galvanometers	Nov. 22, 1892
490,699	Weston, E	Meters	Jan. 31, 1893
490,700	Weston, E	Galvanometers	Jan. 31, 1893
490,760	Weston, E	do	Jan. 31, 1893
494,828	Weston, E	do	Apr. 4, 1893
494,829	Weston, E	Meters	Apr. 4, 1893
494,830	Weston, E	Galvanometers	Apr. 4, 1893
495,827	Weston, E	Batteries, galvanic	Apr. 4, 1893
496,500	Weston, E	Galvanometers	May 2, 1893
496,501	Weston, E	do	May 2, 1893
497,482	Weston, E	do	May 16, 1893
499,313	Weston, E	do	June 13, 1893
500,362	Weston, E	Rheostats	June 27, 1893
500,520	Wetmore, E. P	Heaters	June 27, 1893
496,076	Wetzer, H	Telephones, calls, reed	Apr. 25, 1893
481,988	Weyburn, E. D	Applications, tool and machines	Sept. 6, 1892
479,540	Wharton, J. C. and Braid, J. W	Alarms	July 19, 1892
492,649	Wheatley, T. W	Cut-outs, thermal	Feb. 28, 1893
480,681	Wheeler, S. S	Electro-magnets	Aug. 9, 1892
485,311	White, A. C	Telephones, electric	Nov. 1, 1892
495,951	Whitney, L. C	Lamps and gas fittings, harps and hangers	Apr. 18, 1893
497,563	Whittier, C. R	Motors	May 16, 1893
499,769	Whittingham, G. H	Regulators	June 20, 1893

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499,811	Wicks, P. J.	Telegraphy, quadruplex	June 20, 1893
492,650	Wiemann, W. P.	Lights, arc, gravity feed, gear-clutch	Feb. 28, 1893
482,112	Wight, A.	Street light hangers	Sept. 6, 1892
479,179	Wightman, M. J.	Magneto-electric	July 19, 1892
489,172	Wilcox, C. W.	Drop lights, friction and clutch	Jan. 3, 1893
486,149	Wilder, E. R.	Alarms, burglar	Nov. 15, 1892
495,127	Wilder, E. R.	Annunciators, step-by-step	Apr. 11, 1893
498,869	Wilkerson, B. M.	Telephones, supports	June 6, 1893
479,541	Williams, C.	Batteries, galvanic	July 26, 1892
491,829	Williams, J. A.	Regulators	Feb. 14, 1893
492,176	Williams, J. A.	Magneto-electric	Feb. 21, 1893
479,321	Williams, R. E.	Medical and surgical, combs and brushes	July 19, 1892
494,359	Williams, R. E.	do	Mar. 28, 1893
499,770	Willis, D. J.	Cut-outs, mechanical	June 20, 1893
488,299	Willms, C.	Inductoriums, induction coils	Dec. 20, 1892
483,822	Willson, T. L.	Electric locomotives	Oct. 4, 1892
495,538	Willson, T. L.	Magneto-electric	Apr. 18, 1893
478,928	Wilson, A. J.	Railway signals, block	Aug. 2, 1892
490,761	Wilson, A. J. and Salmon, W. W.	Railway signals, block systems	Jan. 31, 1893
499,693	Wilson, C. H.	Telephones, switch-boards	June 13, 1893
481,989	Wilson, H. T.	Telegraphy, circuit closers, thermal	Sept. 6, 1892
482,464	Wilson, H. T.	Alarms, burglar	Sept. 13, 1892
483,625	Wilson, H. T.	Bells	Oct. 4, 1892
486,206	Wilson, J. C.	Telegraphy, fire	Nov. 15, 1892
480,644	Willoughby, C.	Telegraphy, transmitters	Aug. 9, 1892
491,457	Willyoung, E. G.	Galvanometers	Feb. 7, 1893
497,110	Winand, P. A. N. and Billberg, C. O. C.	Motors, alternating	May 9, 1893
492,881	Winton, H. D.	Railways, systems, overhead	Mar. 7, 1893
484,077	Wirt, C.	Lighting, ceiling blocks	Oct. 11, 1892
484,483	Wirt, C.	Lights, incandescent, special features	Oct. 18, 1892
488,046	Wirt, C.	Insulators	Dec. 13, 1892
497,849	Wirt, H. C.	Lights, sockets and keys	May 23, 1893
499,275	Wirt, H. C.	Lighting, systems	June 13, 1893
499,270	Witner, H. K.	Railways, systems, overhead	June 13, 1893
496,549	Wirsching, A. H.	Telegraphy, printing, multiple wheel	May 2, 1893
495,212	Wiswell, J. F.	Electrolysis, aqueous bath	Apr. 11, 1893
488,726	Wladimiroff, N.	Batteries, secondary	Dec. 27, 1892
479,322	Wollensack, J. F.	Conductors	July 19, 1892
480,683	Wollensack, J. F.	Telegraphy, circuit closers	Aug. 9, 1892
497,756	Woltmann, E. and Triggs, H. A.	Cut-outs, mechanical, rotary	May 16, 1893
487,813	Wöwner, A.	Railways, systems, overhead, trolley	Dec. 13, 1892
495,175	Wood, E. J.	Dynamometers	Apr. 11, 1893
486,656	Wood, J. J.	Magneto-electric	Nov. 22, 1892
487,315	Wood, J. J.	Lights, arc, gravity feed, gear-clutch	Dec. 6, 1892
487,462	Wood, J. J.	Magneto-electric	Dec. 6, 1892
489,065	Wood, J. J.	do	Jan. 3, 1893
491,695	Wood, J. J.	do	Feb. 14, 1893
484,986	Wood, M. M.	Railways, systems, overhead, trolley	Oct. 25, 1892
500,178	Wood, M. M.	Telegraphy, lightning arresters	June 27, 1893
482,668	Woolley, L. G.	Inductoriums, induction coils	Sept. 13, 1892
497,438	Wray, J. C.	Lights, arc, gravity feed, clutch	May 16, 1893
478,493	Wreden, R.	Telephones, systems	July 5, 1892
480,539	Wright, A.	Lights, arc, special features	Aug. 9, 1892
481,381	Wright, A.	do	Aug. 23, 1892
482,936	Wright, A.	Cut-outs, oscillating snap	Sept. 20, 1892
496,807	Wright, A.	Cut-outs, mechanical, oscillating snap	May 2, 1893
496,808	Wright, A.	do	May 2, 1893
486,317	Wright, A. W.	Railways, systems, conduit	Nov. 15, 1892
494,185	Wright, J. E.	Telegraphy, printing, multiple wheel	Mar. 28, 1893
496,081	Wright, J. F.	Insulators	Apr. 25, 1893
497,366	Wright, P.	Rheostats	May 16, 1893
497,852	Wright, P.	Conductors, underground	May 23, 1893
492,547	Wurts, A.	Cut-outs, thermal	Feb. 28, 1893
492,548	Wurts, A.	Telegraphy, lightning arresters	Feb. 28, 1893
492,549	Wurts, A.	do	Feb. 28, 1893
494,186	Wurts, A.	do	Mar. 28, 1893
497,507	Wurts, A.	do	May 16, 1893
497,508	Wurts, A.	do	May 16, 1893
497,509	Wurts, A.	do	May 16, 1893
500,455	Wurts, A.	do	June 27, 1893
500,456	Wurts, A.	Cut-outs, electro-magnetic	June 27, 1893
487,397	Wurts, A. and Scott, C. F.	Telegraphy, lightning arresters	May 16, 1893
500,454	Wurdack, W.	do	June 27, 1893
481,457	Wylie, A. J.	Insulators	Aug. 23, 1892
497,439	Wylie, A. J.	do	May 16, 1893
488,138	Young, J. V.	Railway signals, sectional rail	Dec. 13, 1892
500,248	Young, S. A. and Alden, C.	Cut-outs, thermal	June 27, 1893

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478,182	Young, S., Moskowitz, M., Adler, L. D. and Lowenberg, J.	Lighting, systems, car -----	July 5, 1892
478,183	Young, S. and Moskowitz, M -----	-----do -----	July 5, 1892
489,113	Zaremba, E -----	Railway signals -----	Jan. 3, 1893
498,603	Zipernowsky, C -----	Railways, systems, converter -----	May 30, 1893
488,414	Zunner, J. H. G -----	Electric automatic dampers -----	Dec. 20, 1892



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